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MINNESOTA,

THE

EMPIRE STATE

OF THE

New North-West,

THE

Commercial, Manufacturing and Geographical Centre

OF THE

AMERICAN CONTINENT.

PUBLISHED BY THE

BOARD OF IMMIGRATION FOR THE STATE OF MINNESOTA.

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1878.

ST. PAUL, MINN.

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TO LABORING MEN,

WHO EARN A LIVELIHOOD BY HONEST TOIL;

TO LANDLESS MEN,

WHO ASPIRE TO THAT DIGNITY AND INDEPENDENCE WHICH COMES FROM POSSESSION IN GOD'S FREE EARTH;

TO ALL MEN,

OF MODERATE MEANS, AND MEN OF WEALTH, WHO WILL ACCEPT HOMES IN A BEAUTIFUL AND PROSPEROUS COUNTRY, THIS PAMPHLET, WITH ITS INFORMATION AND COUNSEL, IS RESPECTFULLY OFFERED BY DIRECTION OF THE GOVERNOR AND BOARD OF IMMIGRATION OF THE STATE OF MINNESOTA.

THE BENEFITS OF IMMIGRATION ARE RECIPROCAL.

IF IT IS WELL TO EXCHANGE THE TYRANNIES AND THANKLESS TOIL OF THE OLD WORLD, FOR THE FREEDOM AND INDEPENDENCE OF THE NEW, AND TO GIVE THE OVERCROWDED AVOCATIONS OF THE EAST A CHANCE TO VENT THEMSELVES UPON THE LIMITLESS AND FERTILE PRAIRIES OF THE NEW NORTH WEST, IT IS ALSO WELL FOR THE HAND OF LABOR TO BRING FORTH THE RICH TREASURES HID IN THE BOSOM OF THE NEW EARTH.

THE WEALTH OF MINNESOTA CONSISTS NOT IN HER FERTILE PRAIRIES AND MIGHTY FORESTS, HER BROAD RIVERS AND THOUSAND LAKES, BUT IN THOSE PRODUCTS WHICH FILL THE BARNS WITH PLENTY, AND QUICKEN THE ENERGIES OF TRADE AND COMMERCE.

THE

EMPIRE STATE

—OF—

The New North-West

INTRODUCTORY.

Elevated as in a mirage of beauty, from eight to eighteen hundred fee above the Gulf of Mexico, lies a wide spread domain of unparalleled fer tility. Not mountainous, but with mountainous characteristics—dotte with sparkling lakes of crystal clearness—with a quickly drained surfac of rapidly flowing streams, whose fountains are pure and renovating.

Cast your eye over the map. Take in the head waters of the Missis sippi, Minnesota and Red Rivers of the North, extending through si and a half degrees of latitude from the Iowa line to British America Then sweep westward from Lake Superior away off towards the Missouri and you have a grand level plateau of forest, prairie and stream of 84,00 square miles or 54,000,000 acres. The most of it of a deep rich, blac loam, unequalled in quality and fertility and apparently inexhaustible This constitutes the State of Minnesota, the future seat of empire on thi continent.

A State that can throw over thirty-five million acres of the best land in the world into cultivation, and can produce annually over seven hun dred million bushels of the finest wheat. Assuming the national debt t have been three thousand millions at the close of our late war, and Min nesota alone could throw from her bountiful soil, enough produce to pa that debt in the short space of four years time.

From her inexhaustible pineries, she can produce lumber enough, and o the finest quality, to line both banks of the Mississippi from the Gulf t its remotest spring branch in Lake Itasca, with a continuous city, sloping and terraced from bank to bluffs.

Her export of wheat, flour, corn, potatoes, lumber and beef, will soo dot the great lakes with white winged commerce. The Father of Water her tributary to the Gulf—thence over the broad Atlantic to Europe's peopled surface, whose millions she almost alone can feed.

British America, from the Saskatchewan valley, and from our northern

boundary to old Fort York, on Hudson Bay, will pour in its treasures through the valley of our Red River of the North—the Nile of this continent. Around the head of navigation on the Mississippi and the Falls of St. Anthony, with its one hundred thousand horse power, will arise a powerful and populous city—the capital of the State—and the depot for the cotton and other productions of the south, the furs of the north, the gold, or what is better, the golden grains of the west, the products of the valleys of the Missouri and the Yellowstone to the base of the Rocky Mountains. I might add to this the manufactures of the east, but she will ere long produce her own manufactures, and with the jetty improvements at the mouth of the Mississippi, and the clearing out of the upper and lower rapids, snags and sand bars, she will ship her flour direct to European markets. Her present population of three quarters of a million is but the beginning of the great human wave now rapidly flowing in upon us.

We can sustain and give employment to a population of five millions.

To obtain them, I do not know where to look on the face of the earth, outside of our own country, as far south even as latitude thirty-nine, for a people who would be worth having in Minnesota; but we want all the middle, northwestern, eastern, and southern States, and all the people of the islands, and the Continent of the north of Europe, to know what advantages Minnesota offers to them.

The whole of the British islands, the nursery of that vigorous stock of the human family, which, first taking root in the rocky shore of the Atlantic, has in two hundred and fifty years uprooted the forests filled with barbarous Indians, and like the prolific locust tree, spread wider and wider its annual shoots, until its shadows are reflected from the Pacific—those British islands lie more than five degrees north of the centre of Minnesota. The whole of England, Ireland, Scotland, Belgium, Holland, and a part of France, lie north of the extreme northern boundary of Minnesota. I am now addressing those over the whole globe, who have been invigorated by a moderately cold climate.

But, perhaps, thoughtful reader, you are prejudiced against our climate. Some insist that we cannot raise Indian corn. These wise people have a theory that maize is adapted solely to the latitude they came from. If we could *not* raise Indian corn, we should remember that, with the exception of a part of Italy and Spain, all populous Europe subsists very well without it.

I subscribe to all of Mr. Clay's beautiful eulogium upon it, and perhaps the most valuable quality of this grain is its adaptation to *longitudes* rather than *latitudes*. There is not an Esquimaux Indian basking by his lakeside in the sunshine of his brief, hot summer, who cannot raise and ripen one variety or another of maize. From the delta of the Mississippi to the most distant spring branch that supplies Lake Itasca, the head of the river, this crop can be raised, and is raised and ripened every year.

Settlers, what do you want? I promise you health; and, if prudent, industrious and economical, wealth and happiness. I promise you a good climate, with its drawbacks, of course, as I have found the world over. I promise you good lands—there are none better anywhere

Area of the State.

Minnesota contains within her boundaries the magnificent area of 83,530 square miles.

Reduced to acres we have 53,459,840.

Of this splendid domain, 50,759,840 acres is land, and 4,218 square miles —or 2,700,000 acres is comprised in 7,000 lakes of greater or less extent.

This immense region is divided up about as follows: The pineries on the head waters of the St. Croix and Mississippi rivers occupy 21,000 square miles, or 13,440,000 acres. The "Big Woods" of hard wood timber about 5,000 square miles; or 3,200,000 acres. Leaving arable land of level and rolling prairie and oak openings of 57,530 square miles—or 37,115,840 acres.

The surveyed lands amount to 39,282,418 acres or 1,705 full townships. In this surveyed region are 5,000 lakes averaging 300 acres each, and giving a total of 1,500,000 acres.

These lakes are meandered but not surveyed. Total land and water in surveyed portion of the State, 1,700 townships or 40,782,418 acres.

The unsurveyed portion of the State amounts to 12,677,422 acres; of which 11,477,422 acres is land and 1,200,000 acres is comprised in 2,000 lakes averaging 600 acres each. The number of lakes to a township is much greater in the unsurveyed portions of the State than in that already surveyed. They also average double the size.

It may be interesting to note the areas of a few of the largest lakes in our State. Lake Minnetonka contains 16,000 acres; Lake Winnebagoshish, 56,000 acres; Leech Lake, 114,000 acres; and Mille Lacs, 130,000 acres. Red Lake, which is much larger than any other in the State, has not yet been surveyed.

The above estimate of 2,700,000 acres in lakes does not embrace the vast water areas included within the projected boundary lines of the State in Lake Superior and Lake of the Woods, and along the great water stretches of the international line.

A comparative idea of the area of our State yet unsurveyed may readily be seen in the fact that it is equal to the combined areas of New Hampshire, Massachusetts and Connecticut. The area already surveyed is larger than the States of Illinois and Rhode Island, or, a little larger than both the States of Virginia and West Virginia. The surveyed acreage is as large as the States of Georgia and Connecticut. The field notes of the surveys go to show that there is as much acreage of arable land in Minnesota as the total area of the State of Illinois. This estimate of the arable acreage of this State is wholly independent of the extensive pine areas on the upper tributaries of the Mississippi, St. Croix and St. Louis rivers, which are not classed as tillable land. Neither does it include the mineral area in the north eastern portion of the State.

Minnesota as a Great Railroad Centre.

In 1862 we had but ten miles of railroad; in 1865, two hundred and ten; in 1870, one thousand and eighty-eight, and, in 1877, twenty-two hundred and twenty-five.

From 1865 to 1872, when railroad building ceased here, as everywhere, there were built nearly two thousand miles of road, or nearly two hundred and fifty miles per annum for eight years.

In 1877 there was a revival in railroad extension, 216½ miles of road having been constructed chiefly in the last half of the year. This is largely in excess of the entire four years preceding, and the greatest number of miles completed in any one year in the history of the State, except in the flush years 1870-1-2.

This year, it is certain that the 62 miles necessary to complete the St. Vincent Extension north of Glyndon to Pembina will be built; that the St. Cloud branch of the St. Paul & Pacific will be extended from Melrose to Alexandria; and that the Worthington & Sioux Falls railroad will be completed to the latter point, while the Hastings & Dakota is now being pushed forward to Granite Falls, on the Minnesota river; and the Southern Minnesota road from Winnebago City towards the western boundary of the State.

Other enterprises are talked of, but these advances are as certain as any events of the future can be. Altogether, we can safely count on the construction of our usual yearly average, say from 200 to 250 miles, when we shall have some 2,500 miles within the limits of this State. This is an enormous railroad development for a State whose population does not exceed 750,000 souls. It is equal to about one mile of road for every 325 inhabitants, a ratio of railroad mileage to population equal to any other State. It is, in fact, about one-thirtieth of the entire railroad mileage of the United States. But the value of this magnificent railroad system which traverses every part of the State, as a means of pushing forward the agricultural development and settlement, cannot be over-estimated. No other State in the Union is more completely equipped with the apparatus of internal communication, or is more highly favored in the multiplicity of its competing routes to Eastern markets. But it must be remembered that this railroad system is simply the root of a mighty system of communications which is rapidly extending westward to spread settlement and cultivation through the adjacent Western Territories, and to gather up their rapidly increasing products and pour them back upon the great commercial centres of Minnesota.

Minnesota as the Manufacturing Centre of the Continent.

WATER POWER AND MANUFACTURING CAPACITIES.

Minnesota has within her borders a water power unequalled in the world, and I may safely call it the future manufacturing centre of this continent. With its one hundred and twenty thousand horse power at Minneapolis, with the Falls of the Minnesota river, Sauk Rapids, Little Falls and Pokegoma Falls further up the Mississippi; added to the Falls of the St. Croix and the Dalles of the St. Louis river, and numerous other smaller streams, she presents a permanent power on a broader scale than can be found any where on this continent or in Europe. Although her power is as yet almost as wild and free as at Niagara, the value of the flour manufactured in 1877 is estimated at fifteen million five hundred thousand dollars, and that of the manufactures of all kinds at $42,600,000.

Her flour and saw mills, with their employees, are about as follows:

Flour mills	405
Number of runs of stone	1,511
Employees in flour mills	2,642
Saw mills	250
Employees in saw mills	9,000
Wheat elevators	70
Amount of flour manufactured	2,600,000 barrels

One county (Hennepin), with but the spray from the Falls of St. Anthony as it were employed, and a little water power away from the river, manufactured in 1877, from thirty-one flouring mills, with 237 run of stone, employing 408 men, 1,100,000 barrels of flour, worth at the mills $7,500,000.

With twenty saw mills, they usually manufacture 200,000,000 feet of lumber, 100,000,000 shingles, and 30,000,000 lath, value $4,700,000. Employees in mills and yards, 1,500; in the woods, 2,500.

Four other flouring mills are in course of erection, two of which, with six and thirteen run of stone, will commence operations on the 1st of May. Two others, with twenty-four and thirty run of stone, will be finished in season for this year's crop, and will add to the milling capacity of the county seventy-three run of stone, giving a total of three hundred and ten run, and will make Minneapolis the

GREATEST FLOUR MANUFACTURING CITY IN THE WORLD.

By utilizing all this great power, she can make flour enough to supply all of this country and part of Europe; and is prepared to double or quadruple her mill-stones as rapidly as she is warranted in doing so.

When Minnesota produces (as she can when fully settled) over seven

hundred million bushels of wheat per annum, the water power at Minneapolis alone can manufacture over half of this flour, or to be exact, 72,700,000 barrels, as well as all the pine now growing on the head waters of the Mississippi and Rum rivers, to the extent of 2,281,700,000 feet. That is what 120,000 horse power can do annually if it has the material to work upon.

At present, but 6,800 horse power is utilized, or less than 6 per cent., though the whole flow of water is available, and offers to manufacturers a field unsurpassed in this country.

The water shed of the Mississippi river above the Falls of St. Anthony is about five times that of the Merrimac river above Lowell, Massachusetts. The fall here is about seventy-five feet, or about twice that of Lowell. The annual rain-fall in the valley of the Merrimac averages about forty inches. Here it is somewhat less; the evaporation here is greater. On the other hand, the flow of the river here, from the great extent of flat land, and the large area of the lakes, marshes, &c., on its tributaries, is more uniform than the Merrimac. On the Merrimac there are large reservoirs, regulated for the purpose of supplying water in day times. Here the opportunities for such improvements are even greater.

The amount of power utilized at Lowell throughout the year, with occasional short periods of interruption to some of the mills during freshets, is about *Ten Thousand Horse Power;* with the same degree of perfection in the arrangements for the use of the water, about *One Hundred and Twenty Thousand Horse Power* could be utilized at the Falls of St. Anthony during the day time throughout nearly the whole year.

It is twelve times greater than the Augusta water power on the Kenebec river, ten times greater than the water power at Lowell, and four and two-tenths times greater than the water power on the Androscoggin, at Lewiston, and is sufficient to turn the mills of England and Scotland combined.

The volume of water passing per minute at a low stage of water, is equal to 450,000 cubic feet, equivalent, if all utilized, to 6,000 engines of 20-horse power each.

The river is navigable nearly to the Falls. Thus may be brought to the very threshold of the mills, by steamboat, the crude materials from every quarter of the globe.

J. A. Wheelock, editor of the *Pioneer Press*, former Commissioner of Statistics, a gentleman thoroughly conversant with the subject, speaks as follows of the manufacturing facilities afforded by other streams:

"The St. Croix Falls, which are only second to St. Anthony Falls in hydraulic power, are similarly, though somewhat less advantageously situated at the head of navigation upon a tributary of the Mississippi. Except the Minnesota, nearly every tributary of the Mississippi, in its rapid and broken descent to the main stream, affords valuable mill sites. The Mississippi itself, in its descent from its Itasca summit to Fort Snelling, in which it falls 836 feet, or over 16 inches per mile, is characterized by long steps of slack water, broken at long intervals by abrupt transitions in the character of the rocks which form its bed, and forming a series of falls and rapids available for hydraulic works. Pokegoma Falls, Little Falls, Sauk Rapids, and St. Anthony Falls, are the chief of these. But the Elk, Rum, St. Croix and numberless smaller streams on the east slope of the Mississippi, the Sauk, Crow, Vermillion, Cannon, Zumbro, Minneiska, Root, and their branches, nearly all the tributaries of the Minnesota, and a multitude of streams be-

sides, in their abrupt descent over broken beds of limestone or sandstone, through long and winding valleys or ravines, with a fall of from three to eight feet per mile, afford an unlimited abundance of available water power to nearly every county in the State. This diffusion of hydraulic power throughout the whole State, is a feature whose value as an element of development, can scarcely be over estimated, as it gives every neighborhood the means of manufacturing its own flour and lumber, and affords the basis of all those numerous local manufactures which enter into the industrial economy of every northern community."

From what I shall show of the immense resources of Minnesota, in the products of her forests and fields, it will be apparent that the ability to convert these products into manufactured articles, and thus greatly enhance their commercial value, would be a crowning blessing, and secure to her people the elements of the most unexampled prosperity.

Our unrivalled power invites not only the maximum of possible production to remain at home, but also offers our mills and the cheap transit of the Mississippi, to the cotton of the South, on its legitimate way to the millions of people who will soon gather beyond us, and thus save the circuitous route by way of New England.

Our railroads to Lake Superior connect this manufacturing power with the mines of iron, copper, &c., which are already among the most important in the world.

If to these bulky ores, facilities for cheap manufacture are offered in close proximity to their native beds, why should they be sent to remote points at unnecessary expense. Situated as we are in the heart of a fertile country, on the line of communication with the true "Northwest," and at the head of several thousand miles of cheap inland navigation, connecting thereby with the commercial interests of a vast population, it is no marvel that this water power should be considered as the most important in the known world. With a poor soil, and great scarcity of the raw material for manufactures, Massachusetts, by careful improvement of her commercial and manufacturing advantages, has attained the first rank for wealth and influence among the States. Her many rivers turn the wheels of industry, whilst her merchant ships bring to her doors the raw materials from every clime, and again, go out of port laden with the products of her skill and labor; and her boots, shoes, agricultural implements and woolen and cotton fabrics, find a market in every village in the land. With a vastly richer soil, immense and varied resources within her own borders, and ample facilities for manufactures and commerce, Minnesota is destined at no distant day to be to the great West and Northwest, what Massachusetts is to the Eastern States—the great manufactory of all the staple articles which require powerful machinery for their production. Minnesota is in the midst of the great wool growing region of the north, her prairies teem with the flocks whose massive fleeces must soon attract thither the spindle and the loom. We now import at great cost railroad iron, stoves and various other heavy articles, for the manufacture of which she has abundant natural resources. There is no reason why we should not scatter our copper and iron wares throughout the Mississippi valley, and compete with Pennsylvania in the products of her foundries. While the rapidly growing settlements springing up in the States and Territories westward, and in the

British possessions on the north, will furnish an exhaustive market for all the various manufactures, which the immense machinery to be moved by our water power can produce.

Woolen factories have been established at the Falls of St. Anthony, and the finest blankets and cassimeres this country can produce are now being made there. The blankets took the premium at the Centennial Exhibition.

Minnesota as a Great Commercial Centre.

Her situation is pre-eminent. Her commercial facilities unrivalled. Occupying the geographical centre of the continent, she renders all sections of our country tributary to her—she scatters her trade and exports everywhere. With great rivers upon her eastern and western border, flowing towards different zones—a great river in the centre of the State flowing crescent shape from her extreme western almost to her eastern border, navigable for 238 miles through the heart and garden of the State. The Mississippi, running eight hundred miles through the State, and navigable for 540 miles within her boundaries, opens up to us the Gulf and broad Atlantic.

With the "Father of Waters," Minnesota can gather furs from the north, and tropical fruits from the south; by the same channel, and its immense railroad connections, she can scatter her wares through the United States, and send her flour and other produce to Europe—making direct exportations and importations, as she is now doing, avoiding all middle men and expensive charges and delays incident to a warehousing system in any or all of the eastern cities. Young as she is, Minnesota has set up housekeeping for herself.

Taking advantage of the fact that she is now close up, in point of time and expense, through her unrivalled facilities with all the great markets of the old world, Minneapolis, the great grain market of the Northwest, has commenced shipping her flour direct to Europe; and the wholesale merchants of Saint Paul, who did a business in 1877 of $28,000,000, are importing goods direct from Europe. A barrel of flour can now be shipped direct to Glasgow for $1.52, and to Liverpool for $1.57 per barrel.

The Mississippi, interrupted only by the Falls of St. Anthony, Sauk Rapids, and Little Falls, is navigable to the foot of Pokegoma Falls, distant but 236 miles from its source. On the Minnesota river, in good stages of water, boats run to Granite Falls, a distance of 238 miles from its mouth. Our fertile Nile, called Red River of the North, gives 380 miles of navigable water on the western boundary of the State. The St. Croix furnishes 52 miles of navigable water on the eastern border. Lake Superior gives 167 miles of shore line to the north-eastern section of the State, and the St. Louis river, the principal stream of that section, adds 21 miles of navigable waters to the extreme west end of Lake Superior. This river is important, as the first link of the great chain of rivers and lakes of the St. Lawrence

system. Forty smaller rivers, with a vast number of still smaller streams tributary to them, ramifying through fertile upland and grassy meadow in every section of the State, afford invaluable facilities for lumbering, milling, manufacturing and agriculture. To sum up, Minnesota has 2,796 miles of shore line of navigable waters—one mile of coast line to every 30 square miles of surface. Ohio, one of the best watered States, has but one mile of coast line to 67 miles of surface. By this great extent of inland navigation, she can gather up the surplus of products ready for shipment from the largest markets. The commerce of this State is yet in its incipiency, confined chiefly to the exportation of wheat, flour, lumber, furs, game, and the importation of articles for home consumption.

During the preparation of the preceding pages, I have found so much of a general nature that is valuable and interesting—so much information that is just what is needed by the immigrant, as long experience has shown—in a work by Mr. Pennock Pusey, late Commissioner of Statistics, that I have been constantly tempted to copy from its pages. On the subject I am now treating, I quote:

"The commercial position of Minnesota is perhaps the grandest among the States. Occupying the exact centre of this continent, and constituting the water shed of its eastern half, the steam navigation of three great internal water systems terminates here, viz.: the Mississippi River, northward from the Gulf of Mexico; the Red River of the North, southward from Hudson's Bay; and the St. Lawrence River and chain of great lakes, westward from the Atlantic. Minnesota is thus the focus of three cardinal radii of a vast commercial system; the fourth radius, connecting her with the Pacific Ocean, will be supplied by the Northern Pacific Railroad. This road, already constructed directly through our State to Bismarck, on the Missouri, will be the shortest thoroughfare between Asia and Europe, and place Minnesota in the highway of the world's traffic. Here the whole trade of those converging water lines will break bulk, and constitute this State the entrepot and distributing theatre of a commerce whose extent and wealth it is difficult to over-estimate.

"The St. Paul & Sioux City Road also places Minnesota in advantageous connection with the Union Pacific Railroad.

"The interior water system and the great lakes are connected by a railroad from the head of navigation on the Mississippi to the head of Lake Superior. This road was completed in 1870, and affords a new and invaluable outlet for the multiplying products of the State. The head of Lake Superior, while practically as near the seaboard as Chicago, at the head of Lake Michigan, has the advantage of being nearly 300 miles nearer the heart of those western areas whose exhaustless resources feed the vast commerce of those lakes. By this short cut, our trade may avoid the circuitous and expensive route *via* Milwaukee and Chicago, the necessity of employing which has heretofore stripped us of our great natural advantages. But these disabilities are now ended. Minnesota has now the choice of the many diverging and converging channels of communication to which lavish nature and commercial sagacity justly entitle her."

Hon. Wm. H. Seward, in a speech delivered at St. Paul in 1860, used the following striking language:

"Here is the place—the central place—where the agriculture of the richest region of North America must pour out its tributes to the whole world. On the east, all along the shore of Lake Superior, and west, stretching in one broad plain in a belt quite across the continent, is a country where State after State is yet to arise, and where the productions for the support of human society in their old crowded States must be brought forth. * *

"I now believe that the ultimate last seat of government on this great continent will be found somewhere within a circle or radius not very far from the spot on which I stand, at the head of navigation on the Mississippi River."

The commerical position of Minnesota upon the termini of the three great water lines of the continent, not only gives it an immensely wider capacity of interior trade, but a far easier access to the sources of supply of raw material. A region six times as large as all New England, as yet undeveloped, but already starting on the swift career of Western growth, and capable of supporting many millions of population, is directly dependent upon Minnesota for all the manufactured commodities it may consume. Its position relative to these Northwestern valleys, invests it manufacturing capabilities with an importance greater than those of any other of the interior districts of the continent. For the future manufacture of cotton and woolen fabrics, it has decided advantages of position over New England. The Mississippi River brings it into intimate relations with the sources of the cotton supply, and it lies in the midst of the great wool zone of the continent.

When to all this is added the further fact, that from her western boundary, stretches the only tract of arable land reaching to the Rocky Mountains, north of the Great American Desert, and the most feasible route for a Pacific Railroad, the grandeur of her position, as the great entrepot through which will pass the immense traffic from ocean to ocean, and continent to continent, equals that of any other commercial centre on the face of the globe, and the greatness of her future baffles all attempt at computation.

Agricultural Interests and Capacities.

I now come to the pith and marrow of my subject, where the pen is sure to run riot, unless held with a master hand. If ever there was a time when suppressed enthusiasm had to be indulged in, it is in treating of the contents of this chapter.

No single fact exhibits with greater force the extraordinary developments of our State than the unprecedented enlargement of her cultivated area. This in 1850 was 1,900 acres, in 1860 it was 433,267 acres, in 1870, 1,863,316 acres, in 1877, nearly 3,000,000 acres.

The following statement shows the number of acres of tilled land at various periods since the Territorial organization of Minnesota in 1849:

	Acres.		Acres.
Cultivated area, 1850.....	1,900	Cultivated area, 1866.....	895,412
Cultivated area, 1854.....	15,000	Cultivated area, 1867.....	1,092,593
Cultivated area, 1859.....	345,000	Cultivated area, 1868.....	1,387,470
Cultivated area, 1860.....	433,267	Cultivated area, 1869.....	1,619,456
Cultivated area, 1865.....	630,000	Cultivated area, 1870.....	1,863,316

The United States census, giving fuller returns than those as yet obtained

under the State system, shows a still greater actual progress—the number of cultivated acres, being:

In 1860, 556,250. In 1870, 2,304,683,

State statistics give in 1877, 2,896,496 acres in cultivation.

This exhibits an increase of over 1,500 fold during the 27 years ending with 1877.

From the prestige given to Minnesota throughout the world by the immense crop of 1877, and the large influx of population now pouring into the State; filling its western borders with eager land hunters from Iowa to the British line, as early as March, '78, it will be safe to estimate the cultivated area of Minnesota in the fall of 1880, at not less than 5,000,000 acres.

A comparison of the products of Minnesota with those of Iowa and Ohio, as shown by the official returns of each, affords the following exhibit of averages:

	Wheat.	Oats.	Corn.	Barley.	Rye.	Buckwheat.	Potatoes.
Minnesota,	17.9	36.9	37.3	28.5	19.2	16.4	105.09
Iowa,	9.95	28.4	36.12	23.07	13.28	9.49	81.01
Ohio,	11.38	23.86	34.37	20.38	9.30	10.97	72.12

Here is certainly food for honest pride in the agricultural capacity of Minnesota—an attestation beyond cavil of her superiority in the production of each of seven leading crops over that of two noble States, justly classed, next to ours, as the most productive in the Union! She not only far excels these States in her specialty, wheat, but surpasses both in their own specialty, corn.

I have alluded to Mr. Clay's beautiful eulogium upon the great cereal, corn; and it now seems proper that I should give place to another upon *our* great staple, from the pen of Hon. Pennock Pusey, Private Secretary to Governor John S. Pillsbury:

WHEAT CULTURE.

"The history of the human race abundantly affirms the fact that no nation has long lagged in the race for civilization which gave prominence to the growth of wheat, or which assigned to the consumption of that cereal the chief place in its domestic economy. The important part which it has played in determining the force and character of those nations which have figured upon the world's theatre, is shown in the splendor of that civilization which blossomed co-eval with Egyptian wheat fields, and it is beheld in the earliest biblical history, in God's mysterious providence with the Jews, whose sacred oblations were of the 'finest of the wheat,' whose holy feasts were of unleavened bread, and whose strong sinews were knit for conflict with giants. Wheat was the prime food of those dominating races on the shores of the Mediterranean, whose triumphs in war and peace contribute the most vivid page to history; its nutritive and impelling agency is apparent in the sanguinary struggles and conflicts of ideas through which modern civilization has groped its tortuous way. When the plains and hill-sides of central Europe became mantled with the kingly cereal which gave brains and

shape to the rude energy of the people, imperial Rome, grown effeminate with over-indulgence, fell before the fierce onslaught of her Northern foes. So the theatre of civilization has constantly moved northward and westward, where climate and soil favor the growth of the sturdy food which is its primary nourishment. The first condition of genuine progress is an adequate supply of first-class food. Efforts at higher advancement, without this foundation, grow morbid, ephemeral, and futile.

"In modern times, through the aid of chemistry and anatomy, the art of good feeding, in a true sense, is advanced to a positive science. That food is shown to be best which at once gives toughness to muscular fibre and tone to the brain. That nutriment excels which best sustains the energies against constant and exacting demands; which re-awakens the drooping spirits and thickens the waning blood without the aid of maddening stimulants.

"That wheat fulfills all these conditions is not only attested by the character and fate of nations, but is susceptible of scientific demonstration. The nice adjustment of its vital properties supports brain and blood and muscle, in just the proportion requisite for the highest type of manhood. Refinement, fortitude, and enterprise most distinguish those nations which most consume wheat. Beef-eating and wheat-consuming races at once dominate and elevate the rice and pork consumers with whom they come in contact. England, who has long been the conceded mistress of the seas, and whose dependencies well-nigh encircle the globe, has so stimulated and enlarged her capacity for wheat growing, that her annual average is 28 bushels per acre. But her consumption so far out-runs her production, that she lays the world under contribution for her supplies of bread. Russia, who not only feeds her own vast population, but exports largely to hungry communities abroad, is advancing to an exalted place among nations with a rapidity second only to that of the United States. But a more practical as well as serious aspect of the subject pertains to those social problems connected with supplies of bread. The grave significance of the question involved is not susceptible of concealment when the fact is considered, that while the consumption of wheat, as the choice food of the human race, is rapidly extending, the capacity of wheat-growing regions for its production is rapidly diminishing.

"According to the census of 1870, the entire wheat product of New England was sufficient to feed her own people only three weeks! That of New York sufficient for her own consumption six months; that of Pennsylvania, after feeding her own people, afforded no surplus; while the surplus of Ohio was but 3,000,000 bushels for that year, and for the past six years her wheat crop has fallen below her own consumption. In the ten years ending in 1870, the wheat crop of these States decreased 6,500,000 bushels.

"In the light of these facts, the achievements of Minnesota in wheat growing, as well as her untaxed capacity for the continued and increased production of that grain, assume a proud pre-eminence."

Both in the relative magnitude of operations and in the average per acre, she leads the sisterhood of States. Prior to 1868 wheat occupied more than one-half of the whole cultivated area of the State. Since that

time nearly two out of every three cultivated acres have been devoted to this cereal.

In 1877, out of the 3,000,000 acres under cultivation nearly 2,000,000 were in wheat. The product, as is by this time well known throughout the world, was estimated at 40,000,000 bushels.

THE AGGREGATE AND AVERAGE YIELD OF WHEAT DURING THE LAST FOURTEEN YEARS.

Years.	Acres sown.	Bushels Produced.	Average Per acre.
1860	.....	5,101,432	22.05
1865	.....	9,475,000	22.07
1866	.....	7,921,442	14.46
1867	683,784	10,014,828	14.64
1868	858,316	15,382,022	17.91
1869	937,029	16,587,621	17.70
1870	1,019,744	15,372,941	15.07
1871	1,096,578	13,467,300	12.28
1872	1,267,309	22,059,375	17.40
1873	1,548,713	26,402,485	17.04
1874	1,681,830	23,938,172	16.03
1875	1,764,109	30,079,300	17.05
1876	1,869,172	17,964,632	9.61
1877	1,819,761	40,000,000	22.00

From the average of nineteen years, ending with 1877, a yield of 17 bushels per acre may be assumed as the established wheat average of Minnesota. Particular localities, sometimes embracing whole townships, produce frequently an average of 25 and 30 bushels, while yields exceeding 40 bushels are not unfrequent in favorable seasons in nearly every county in the State.

Nothing is easier than the common practice of making a few samples of great crops serve the purpose of exaggerating the total yields. These are universally dispelled by official figures, which alone I give.

The average yield in Wisconsin is reported officially to be 13.04 bushels peracre. The largest known yield of Ohio, one of the leading wheat States, was 17½ bushels per acre, while the average for ten years in that State, as officially shown, was but 10.55 bushels per acre. Illinois, according to high local authority, produces from year to year not more than 8 bushels of wheat per acre; only four States, by the census of 1850, reached an average of 15 bushels per acre, while the whole wheat area of the United States does not exceed *eleven* bushels. The wheat crop of Minnesota for 1876 averages, it will be seen, but 9 61-100 bushels per acre. This crop was a failure without a parallel in the history of Minnesota; yet our failure compares favorably with the average good crops of Ohio and Illinois, or even of Iowa, whose average in a series of seven years, as shown by her reports, was but 10 30-100 bushels.

The Wheat Crop of 1877.

To give an idea of how the wheat has turned out in individual cases, the following extracts clipped during the threshing season from our State newspapers are appended:

SCOTT COUNTY.

In Eagle Creek, Robert Dean, on 85 acres of old land, cropped for 22 years, had an average of 21 to 22 bushels to the acre.

Mr. John Eller, on 106 acres, averages 25 bushels to the acre. The most of this was old ground. On 17 acres of new ground he raised 553 bushels —an average of over 32 bushels to the acre.

Near Belle Plaine, in the edge of the timber, August Vought had 42 bushels to the acre, and N. Bay 31 bushels, and on the prairie M. Siegfred had 27 bushels.

Mr. Robert Smiley, of Spring Lake, on 12 acres, averaged 27 bushels to the acre.

Fayette Ufford, of Cedar Lake, from 15 acres of old ground, threshed 316 bushels, an average of about 21 bushels.

The most extraordinary crop of wheat we have had reported in the State, is said to have been raised by Fred. Almich, in Tyrone township, who, from five acres of land, has threshed 275 bushels of wheat, or 55 bushels per acre. The statement comes well authenticated.

HENNEPIN COUNTY.

The St. Paul *Pioneer-Press*, of August 31, 1877, prints the following cheering paragraph: "A gentleman who has been connected for the past summer with the Chamber of Commerce of Milwaukee, was in Minneapolis recently, and says 'that wheat operators there have received information from every section of the State of Minnesota, sufficient to base a pretty correct estimate of the average yield. It is the opinion of the Chamber that it will be 25 bushels to the acre.' The average in Rich field township has been carefully kept, so far as threshing has been done, by Mr. Charles Hoag, and runs over 25 bushels to the acre, and all on old land, too."

According to the above, the crop of last year would amount to forty-five and one-half million bushels.

DAKOTA COUNTY.

As a granger, Mr. Malthy, of Pine Bend, has proved a success, but this year he has outdone himself in raising wheat. His whole field was fine, but there was a piece of two acres, by actual measurement, that looked to him to be something better than anything he had before seen. These

two acres he had stacked separate, and then he bet with the threshers as to the yield, his figure being sixty bushels, and the threshers taking him under. Before threshing, a search was made for large and small heads, the smallest having twenty-five kernels, and the largest sixty-eight. The stack threshed, the wheat was measured, the threshers taking pains to heap each measure and refusing to clean up under the machine, and the result was ninety-one bushels of splendid No. 1 wheat, or forty-five and one-half bushels to the acre. Mr. Maltby is confident that by elevator measure there is nearly or quite one hundred bushels of the wheat.

GOODHUE COUNTY.

J. L. Scofield, from 100 acres, threshed 3036 bushels of wheat, an average of over 30 bushels per acre.

The wheat crop of Chas. Smith, near Red Wing, yielded 27½ bushels per acre, and weighs sixty-one pounds to the bushel. This was on land that had produced a crop every season for twenty-two years.

WASHINGTON COUNTY.

Oliver Dalrymple has raised from his Cottage Grove farm 72,000 bushels of wheat, and from his Dakota farm 192,000 bushels — in all 264,000 bushels. A pretty good harvest for one poor farmer.

Mr. Archibald McCallum, whose farm lies in Cottage Grove township, has obtained 498 bushels of wheat from ten acres of ground, being within a small fraction of 50 bushels per acre; but as good wheat invariably overruns thresher's measure in weight, the yield will doubtless exceed an average of 50 bushels, and good judges think it may reach 54 bushels of weighed grain. We know of one well authenticated product of 190 bushels upon four acres, being an average of 47½ bushels, and we have heard of even greater results produced upon a very few acres, but an average exceeding 50 bushels per acre upon so large a tract as ten acres, we believe to be wholly unprecedented.—*Stillwater Messenger.*

ROCK COUNTY.

The biggest yield of wheat which thus far has come to our knowledge was threshed for Mr. Geo. Blaisdell. From six acres harvested and stacked separately Mr. B. obtained the extraordinary yield of forty-one and three-fourths per acre, which this year overruns considerably when weighed.

RICE COUNTY.

Mr. W. H. Scofield, of Cannon Falls, states that a thresher in that town gave twenty-five bushels per acre as the result of a week's threshing in Stanton and Cannon Falls.

Mr. W. C. Cleland, of Dundas, got 452.20 bushels of wheat from thirteen acres; an average of about 35 bushels to the acre, and each bushel weighed 63 pounds.

LE SUEUR COUNTY.

W. W. Hodgkins, in Cordova township, threshed 900 bushels of wheat from 30 acres, giving an average of 30 bushels.

Here is a good farmer: C. C. Whitney recently threshed a little over two acres of oats and the yield was 160 bushels, or nearly 80 bushels to the acre. He has cottonwood trees, planted in 1872, which measure 21 inches around the butt.

The St. Peter *Tribune* mentions a nine acre field of wheat just across the river from that city which yielded 357 bushels—39⅔ bushels to the acre. The threshers having their doubts, went and measured the field, and found it to contain only nine acres.

OLMSTED COUNTY.

Hon. B. F. Perry, of Kalmar, threshed ten acres of wheat, which yielded 395 bushels, or an average of 39½ bushels per acre, weighing 62 lbs. per bushel.

The Rochester *Record and Union* gives the yields of a number of pieces of wheat in different towns in that county, the yields ranging from 20 to 35 bushels to the acre. The largest yields reported are from the Lost Nation and Canada Fife varieties of wheat.

BLUE EARTH COUNTY.

Louis Fogel, of Mankato, sowed 10 bushels of seed, and got in return 220 bushels.

Mr. Seeberg, of Lime, from 11 bushels of seed, threshed 258 bushels; and Mr. Hoehns, of Le Roy, from 28 bushels of seed, received 575 bushels of wheat—all No. 1. The average sowing was about one and a half bushels of seed per acre.

This season's crop of wheat is so dry that it makes no difference whether it stands in the stack and goes through the sweating process or not. It is so dry that the millers have to dampen it before grinding.

STEELE COUNTY.

Mr. O. L. Knapp, of Clinton Falls, threshed 2,272 bushels of wheat from 70 acres of land, part of which had been under cultivation for more than twenty years. He estimates the yield by weight at fully 2,500 bushels, or upwards of 35 bushels to the acre.

WABASHA COUNTY.

Mr. D. Messer, of Plainview, had an average yield of 39 7-12 bushels per acre on land cropped for the last seventeen years in succession.

MEEKER COUNTY.

The Litchfield *News Ledger* tells of the boss wheat yield. It fell to Mr. Gibney, near Manannah, who got from less than half an acre of ground 29¾ bushels of No. 1 wheat.

BENTON COUNTY.

Hon. David Gilman, of Watab, left with us last week several samples of wheat and oats raised on his farm. One sample of wheat which was raised on land broken in 1849, and which since then has received compensation but twice, has straw that measures five feet two inches in length, and will thresh 25 bushels of No. 1 wheat to the acre. An-

other sample raised on land broken in 1850, and which has been in constant use ever since without compensation in the shape of manure, has straw measuring five feet, and will also go 25 bushels to the acre.—*Lake City Leader.*

MORRISON COUNTY.

On Rich Prairie, Mr. J. M. Clark threshed 469 bushels of wheat from 18 acres of ground, and 226 bushels of oats from 5½ acres, all grading No. 1.

RAMSEY COUNTY.

As a specimen of what Minnesota soil is capable of, it is stated as a fact that the old Ramsey farm near St. Paul has been tilled for 31 years in succession, by the slouchiest kind of tenants, and has never been known to receive an ounce of fertilizer, and yet this year it has produced 24 bushels of wheat to the acre.

The Faribault *Democrat* thinks the most surprising thing about this year's wheat crop is the weight of the grain, the average in that county so far as reported being over 62 pounds to the bushel measure, several fields going as high as 64 pounds, and some from new land 65 pounds, a weight previously unheard of.

The yield of wheat exceeds the estimates for every field thus far heard from. Col. King's Lyndale farm steps to the front with an average of 33⅓ bushels per acre, and several farmers in Carver county report 40 bushels per acre, all No. 1, as a matter of course.—*Minneapolis Tribune.*

COTTONWOOD COUNTY.

Mr. Barden, in 1876, bought a section of railroad land; broke it during that year; last spring he sowed 1¼ bushels wheat per acre, on the sod (it never having been back-set or cross plowed), and last summer, from less than four hundred acres, harvested upwards of *eight thousand* bushels of wheat, while on old land his neighbors raised from 25 to 40 bushels of wheat per acre, while one neighbor raised 100 bushels oats per acre.

S. Greenfield threshed 34½ bushels of wheat from one acre and 15 rods, and the seed was screenings that he had bought for chicken feed.

Mr. Krause, of Southbrook, threshed 40 bushels wheat to the acre.

I might quote dozens of these items, showing similar yields of wheat throughout the county, but the above are sufficient to demonstrate the productiveness of the soil. Of oats and barley the yield is always enormous, ranging of the former as high as 60 and 70 bushels per acre, and the latter from 40 to 60, and in some instances more. A good yield of corn is also produced.

The Des Moines river traverses the county, and affords several excellent water powers. There are already three steam mills in operation, one fine, 4-run mill at Bingham Lake, and two smaller ones at Mountain Lake, so that farmers have at their doors all the necessary facilities for manufacturing their wheat into flour.

President E. F. Drake, of the St. Paul & Sioux City Railroad, and Samuel Collins, Esq., are building a large water power flouring mill on the Des Moines river, at Windom.

JACKSON COUNTY.

G. C. Chamberlin, editor of the Jackson *Republic*, helped measure a field of oats that averaged one hundred and eleven bushels to the acre. Wheat averaged 25 to 30 bushels.

Farmers in this county are going into stock and sheep raising very extensively, and are all making money. Wheat and grass lands are well divided, and the advantages of a diversified industry are well understood.

While writing of this county I am reminded that the Southern Minnesota Railroad will be extended from Winnebago City, in Faribault county, to Jackson, the county seat of Jackson county, this year.

NOBLES COUNTY.

The Worthington *Journal* reports 37 bushels of wheat and 80 bushels of oats as the average yield of a farm in that county. Such facts as these will quickly populate the southwestern frontier.

Nelson Coyer came to Nobles county in June, 1871, and settled upon a homestead in the town of Indian Lake. His family consisted of himself, wife, and five children. All the property he brought with him was a span of Indian Ponies, an old wagon, and a two-year-old heifer, giving milk. He borrowed the money to pay the land office fees, and was consequently $7.00 in debt when he commenced settlement on his homestead.

He has now 125 acres under good cultivation, all seeded; 30 head of cattle, 7 horses, besides hogs and chickens. He raised last year 960 bushels of wheat, 2,400 bushels of oats, 400 bushels of barley and 700 bushels of corn. 11 acres of his wheat yielded 32 bushels per acre, and the balance averaged 25 bushels. He has nearly paid for 80 acres of railroad land, and opened up and improved a tree claim; bought and nearly paid for $600.00 worth of farm machinery; his property is unincumbered, and he is nearly out of debt. He has never had any outside help or assistance, but has accomplished these results, and in hard times at that.

A number of people in the county are engaged in stock raising and sheep farming. Messrs. Sugdon and Gressell came over from England in the Spring of 1877, and opened a stock farm six miles from Worthington, in Dewald township. They have 1000 sheep, a number of horned cattle and two thoroughbred English draft horses—one three-year-old, weight, 1780 lbs., and one two-year-old, weight, 1870 lbs.

Mr. John Alley, three miles from Worthington, keeps 240 head of horned cattle, and 500 sheep.

A number of other farmers in the county have from 200 to 500 sheep, and from 20 to 40 head of horned cattle each.

Durability of Soil on Our Prairies in the Northwest.

The question is often asked, "How many years will your prairie lands produce good crops without renewal and rest?" The answer may be read below:

Mr. Joseph Haskell, the pioneer farmer in all the vast region northwest of Prairie du Chien, has gathered excellent crops from his pioneer field

near Afton, Washington county, which was first subjected to the plow 38 years ago. He has just harvested 25 bushels of wheat per acre on land that was first sown in that grain in 1843, and has been since continuously cultivated, and which in the intervening 34 years has received but one light dressing of manure.

Reports from Farmers on the Timbered Lands on the Line of the Northern Pacific Railroad.

WADENA COUNTY.

A correspondent writes to the Wadena *Real Estate Journal* as follows:

I herewith submit a few items of what was raised on six acres of my farm in the year 1876, (my farm is in the timber land, twelve miles south of Wadena.) I sowed four acres of winter wheat on the 9th day of September, 1875; I harvested 39 bushels and 20 pounds of wheat that weighed 63 pounds to the bushel, strict measure. It must be remembered that the following year, 1876, was the only year that wheat ever failed in Minnesota. From the same land I cut rye from 119 rods 2½ bushels, and the balance was equally as good.

I planted one-half acre of the large yellow Dent variety of corn (that my brother brought with him from Wisconsin), which ripened well before frost, and yielded at the rate of one hundred bushels (ears) per acre; stalks of large growth averaging ten feet high. Potatoes yielded at the rate of 400 bushels per acre, of large size and superior quality. Of garden vegetables—well, I will say that I had a "*heap*," and of fine quality—on my prairie farm of thirty acres I had a fine crop.

I killed five hogs, in full aggregate weight of 1,400 pounds, that did not cost $5 to fat them, nuts and mast being abundant. I have six fine shoats that will weigh 150 pounds each, that are now thriving finely, and I do not feed them anything whatever; the weather is fine, and there is not enough snow to prevent them from getting to the ground—hence they get a good living. I have twenty head of cattle and three horses, all looking fine and wintering well. I butchered 1,500 pounds good grass fed beef, that I sold at the Wadena market for $5 per hundred. So far, this country suits me very well. More anon.

And another:

Perchance the *Journal* may be read by some that think of making Minnesota their home, therefore thought I would write a little item to show the productive capacity of this country. I am now 54 years old and a farmer. I have lived for the last thirty-two years of my life in Rock County, Wis. In 1876, I came to where I now live. I located in the limits of the Northern Pacific Railroad, twelve miles south of Wadena, and, having been a soldier, took a homestead of 160 acres. I had always had an impression that this was too far north to grow all kinds of grain, especially corn; consequently I hesitated, and between hope and fear I commenced with ax to cut, with fire to burn, with mattock to grub, and with oxen to plow a patch of ground (my land is timber, and a beauty of a lot—at least I think so). I cleared and fenced one acre and planted it. Now for the result; I raised one hundred bushels of Early Rose potatoes of large size—one measured thirteen inches long and twenty-two inches in circumference. I planted five different kinds of corn, of which I harvested forty-five bushels, ears, fully ripe and nice, some of it the large yellow and white Dent. I raised seven bushels onions, three bushels beets, thirty bushels Swede turnips, 100 heads good cabbage, five bushels cucumbers, ten pounds good tobacco, all

the early garden sauce that a family of four grown persons could use, and five wagon loads of squashes, citrons and pumpkins. My tomatoes were as fine as I ever saw—one weighing two and one-half pounds. All the above products from a patch of ground ten by fifteen rods. The result of my observation and experience of the past season has more than met my most sanguine expectations. I say, all hail to the Northern Pacific country, long may she wave!

Charles Lane, of Deer Creek, has 1,410 bushels of wheat from 54 acres. Mr. Lane had 5 acres of Sonora wheat, which yielded 105 bushels from *five bushels'* sowing. This Sonora wheat is the result of four years' yield from 59 kernels.

Barley threshed from five acres on the farm of George Foreman yesterday yielded 262 bushels, an average of 52.4 bushels per acre. Barley coming into the elevator here to-day from the farm of S. S. Gardner, one-half mile east of town, weighs 49 lbs. per bushel from the machine.

The *Audubon Journal* has the following: "Our crop reports come tumbling in. This from Lake Eunice: A. Ridel, 38 bushels wheat per acre from 16 acres, and 85 3-7 bushels of oats per acre."

BECKER COUNTY.

The *Detroit Record* gives the following statement of yields from timber lands:

By Chas. O. Quincy, from 2½ acres timber land: Potatoes, 92 bushels; turnips, 6 bushels; beets, 10 bushels; onions, 3 bushels; sweet corn, 3 bushels; field corn, 53½ bushels; strawberries, 1 bushel; tomatoes, 6 bushels; tobacco, 100 lbs.; bell peppers, 1 peck; cabbages, 75 heads; rhubarb, 1 barrel; pumpkins, 600; squashes, 25; cucumbers, 2 bushels; watermelons, 20; pop corn, 2 bushels; radishes, 1 bushel; asparagus, ½ bushel; beans, 1 bushel; peas, 4 bushels; Siberian crab apples, 2 bushels.

By Charles Sturtevant: From 20 acres wheat, 500 bushels; 1½ acres corn, 115 bushels; 1 acre potatoes, 140 bushels.

Thos. Squires has got the results of his summer's work on 6 acres figured down to *dots*, and they certainly are very suggestive. He produced from

Two acres potatoes, 500 bu., sold for 35c bu	$175·00
Two " corn, 190 bu., " $1.00 bu	190.00
One-fifth acre onions, 77 bu., sold for 75c bu	57.75
One acre squash, 9 tons, sold for 1½c. per lb	270.00
One-half acre turnips, 100 bu., 30c per bu,	30.00
One-third acre white beans, 10 bu., $2 per bu	20.00
Sweet potatoes, 8 bu., $2.50 per bu	20.00
Tomatoes, 10 bu., $2 per bu	20.00
Other miscellaneous garden truck	50.00
Total proceeds from 6 acres	$832.75

REMARKABLE GROWTH OF WHEAT.

An Interesting Statement of Facts, demonstrating the Richness and Strength of the Soil of the Red River Valley.

Mr. E. W. Chaffee, the general manager of the Amenia and Sharon Land Company's farm in the Red River Valley, makes a very interesting state-

ment as to the destruction of his crop by hail, and its subsequent growth, of which we doubt if a parallel can be found in any part of our country. He says:

"I put in about 630 acres of wheat on land that was broken and backset last year, commencing my seeding on the 10th of April. The wheat came up and grew very rapidly, giving promise of an enormous crop. On the 29th of June, just before it would have headed, the entire crop was cut off by a hail storm, which was local in its effect, inflicting no damage to other crops in the vicinity. My crop was cut off a few inches above the ground, and as completely as if done by a machine. I considered it a total loss, but examined the ground daily to see whether there would be any further growth, expecting that, if any, it would be from that part of the stalk remaining. It was not until the 11th day of July that I discovered, not a growth of the stalk, but a new growth from the roots, springing up through the debris of the old growth. This grew with a rapidity I never saw equaled. To show how fast it grew, and how soon it matured, I have only to state that the new growth which first appeared on the 11th of July came forward and matured a crop which I began to harvest on the 17th day of August, just *forty-nine* days subsequent to the loss of the original crop. The growth is fully as large as that of the wheat I have observed in this vicinity that was put in on ground broken, but not backset, and will thresh ten bushels per acre.

"After suffering this loss I was naturally led to seek for information in regard to the risk of damage from hail in the cultivation of wheat, and have carefully sought for it from the oldest inhabitant in the country, and am gratified to learn that such storms are of very rare occurrence."

Wheat Culture in the Red River Valley Compared with the Middle States.

The Philadelphia *Inquirer* of June 1st, 1876, contained an interesting article descriptive of the large farms at one or two points on the N. P. R. R. in Minnesota, and draws an instructive comparison between the profitableness of wheat culture in the Red River Valley and the Middle or Western States. In speaking of the large wheat farms of this upper country, the *Inquirer* says:

Five causes have impelled to this extraordinary culture of wheat as a business for capitalists:

First—Ten years' experience have proved that the best quality and largest yield of American spring wheat is raised north of the 43d parallel of latitude and west of the Mississippi River.

Second—Land specially adapted to the culture, in a climate indispensably necessary to it, can only be got in Minnesota and Dakota in large bodies on favorable terms, at prices ranging from $3.50 to $8.00 per acre, and averaging $5.00, according to the distance from a railroad.

Third—Farming to wheat exclusively admits of large economies. The labor and expenses cover less than half the year. The grain is threshed and sold immediately after being cut, the hands are paid off, the horses are sold, the machinery is stored, the watchman and his family are left in charge of the property, and only interest and taxes are running against the investment till the recommencement of work.

Fourth—There is a steady demand in the Chicago and Milwaukee markets for "No. 1 hard" wheat from Northwestern Minnesota, to mix with and grade up the inferior wheats of Iowa, Illinois, Wisconsin and Indiana.

Fifth—The millers of Minneapolis, Buffalo, Black Rock, Rochester and Oswego agree that No. 1 Minnesota spring wheat is harder and "stronger" than any other; that it makes more bread to the barrel of flour; that the flour ground from it takes more water than any other, and for that reason is preferred by bakers; that it is richer in gluten than any other flour; that this wheat makes more "middlings" than any other, and better "new process" flour, which takes the market for family use wherever it is known over the best St. Louis and Georgetown, District Columbia "winter wheat" brands. Hard No. 1 Minnesota is selling in Milwaukee for $1.20. The best Milwaukee No. 1 is selling there for $1.13¼, a difference in favor of the wheat from the Northern Pacific region of 6¾ cents a bushel, which half pays the freight on it from Duluth to New York.

The Red River Valley, which is the heart of these large operations in wheat culture, is seventy-five miles wide and 400 miles long. Experience in the Selkirk settlement, in Manitoba, above and below Fort Garry, justifies the declaration that the soil of the valley is inexhaustible. There is no diminution in the yield of fields which have been cultivated continuously for a half century. The peculiar characteristic of the climate of Northern Minnesota, dryness of the atmosphere in ripening and harvest time, is the secret of the excellence of their spring wheat, together with the silicious quality of their loamy soils.

To what degree the United States are to become dependent for bread on this Northwestern region, which has been not inaptly named the "continental wheat garden," is matter for curious thought. The power of the old States to produce wheat remuneratively has been lost by continued cultivation. The weakened soils will not yield inferior qualities in sufficient quantities to pay a profit. The average product of even the young States of Illinois, Iowa and Wisconsin does not exceed 8 bushels to the first, 10⅓ to the second, and 13 to the latter. Even Ohio gives but 10½ bushels; all No. 2 grain. The distance to the Atlantic seaboard from the Red River Valley is not an adverse factor in the account with its wheat.

THE GOLDEN HARVEST IN THE RED RIVER VALLEY.

Messrs. Dypvick and Kvello raised 4,300 bushels of wheat last year from 130 acres—an average of a little over 33 bushels per acre. Their wheat is the Scotch Fife variety, and is of such superior quality that they have already sold 1,600 bushels for seed at $1 per bushel.

Ole Ammonson informs us that his crop averaged 35 bushels per acre, and that the lowest yield he has heard of in his vicinity was 28 bushels.

Wm. Craswell raised 131 bushels of wheat from four acres—32¾ bushels per acre. As Mr. Craswell only sowed three bushels of seed on the four acres, it is certainly a remarkable yield. His field of sixteen acres of oats yielded 1,024 bushels, or 64 bushels per acre.

L. Hadley, Fargo, reports a yield of 1,538 bushels of wheat from 65 acres—an average of 23⅔ bushels per acre; and another of 840 bushels of wheat from 30 acres—an average of 28 bushels per acre.

John Mosher, from 300 acres of wheat, had a yield of 9,158 bushels, an average of 30½ bushels per acre. From 9 acres of oats, 495 bushels, an average of 55 bushels per acre, and from 10 acres, 123 bushels flax seed.

E. T. Olson, 15 acres wheat, with yield of 576 bushels, average 34½ bushels per acre, and from one and a half acres a yield of 100 bushels of oats.

O. Holman, 30 acres wheat, 1,000 bushels.

Hans C. Oleson, 40 acres wheat, 29¼ bushels per acre.

Henry Israelson, 72 acres wheat, 31 bushels per acre.

From 140 acres of wheat, Jas. Holes, Fargo, threshed 3,845 bushels, an average of 27½ bushels per acre. From 17 acres of the same piece, which had formerly been cultivated as a market garden, he obtained 508 bushels, within a small fraction of 30 bushels per acre, which goes to show that thorough working of the ground pays as well for wheat as for anything else.

J. B. Chapin's field of 360 acres of wheat threshed out 9,700 bushels, averaging 27 bushels per acre. From 80 acres of oats he had 5,000 bushels; being sixty-two and a half bushels per acre.

Peter Siems, from 50 acres, produced 3,600 bushels of common white oats, averaging 72 bushels per acre, and weighing 44 lbs. per bushel.

Hans E. Bjerke raised 627 bushels of wheat from 15½ acres of land, an average of 40½ bushels per acre. This is the largest yield, with one exception, that we have heard of in the county this season. Mr. B. sold the whole crop at $1 per bushel for seed.

THE DIFFERENCE.

The *Rural New Yorker* of April 28th contains a letter from a man who sixteen years ago bought 14 acres of land about 25 miles from New York. He says that since then he has been manuring this tract, until the cost of the fertilizers now amounts to more than the price originally paid for the land. He wants to know how much longer he has got to keep this up, "taking nothing off and putting everything back," before he will be able to get on his fourteen acres "a rich soil a foot deep." Probably the rest of his natural life time. People who like that style of operations are welcome to keep it up, but most people would rather sell, or if they couldn't sell, then give away, that fourteen acres and come to Minnesota, where they can get, already made, "a good rich soil from one to three feet deep," that every year returns to the owner more than the original cost.

A Large Yield and a Pointed Lesson—The Way to Recuperate Impoverished Soil.

A remarkable feature of the wheat crop of 1877 is the fact that the heaviest yields are from the oldest fields. Many experiences of farmers in the oldest counties are similar to the following:

"Mr. G. C. Thorp raised on fifty acres in the northwest quarter of section twenty-five, town one hundred and eleven, range nineteen, Rice county, 2,050 bushels of wheat, being an average of 41 bushels per acre, as measured by the Buckeye seeder. About one-half of the land was new breaking, this being the first crop. The other half was on timothy sod which had been continuously in grass for eight years, on two of which the field was mowed and the other six pastured. On this sod portion of the land the wheat was so superior that in the opinion of good judges the average yield exceeded 45 bushels and some of it reached 50."

This is strongly confirmatory of the wisdom of rotation of crops which we are glad to observe our best farmers are practising, the land prior to being seeded in grass having been so impoverished by continued grain culture as to become practically worthless for longer use in that way.

This is What a Glass Pyramid of Minnesota Wheat Would Say to the World at the Paris Exposition of 1878:

No. 1
MINNE-
SOTA WHEAT.
SIXTY-FOUR LBS.
TO THE BUSHEL.
THE BEST SPRING
WHEAT PRODUCED IN
AMERICA. IT COMMANDS
A HIGHER PRICE BY EIGHT
CENTS A BUSHEL THAN ANY
OTHER WHEAT. FORTY MIL-
LION BUSHELS OF THIS WHEAT
WERE PRODUCED IN MINNESOTA IN
1877. THE FLOUR FROM IT IS
GRADED CONSIDERABLY HIGHER THAN
ANY OTHER IN THE AMERICAN MARKET.
MINNESOTA HAS A LARGER MILLING IN-
TEREST AND PRODUCES MORE FLOUR THAN
ANY OTHER STATE IN THE UNION. HER FOUR
HUNDRED AND FIVE FLOUR MILLS, WITH THEIR
ONE THOUSAND FIVE HUNDRED AND ELEVEN
RUN OF STONE, ARE CAPABLE OF GRINDING HER
CROP OF LAST YEAR INTO EIGHT MILLION BARRELS
OF FLOUR; OR HER EXPECTED CROP OF 1878, OF
SIXTY MILLION BUSHELS, INTO TWELVE MILLION BAR-
RELS—WORTH, AT THE PRESENT PRICE AT THE MILLS,
THE ENORMOUS SUM OF SEVENTY-FIVE MILLION DOLLARS.

The Cass-Cheney Farm.

A correspondent of the *Country Gentleman*, who visited this farm during harvest, tells the readers of that paper what he saw, as follows:

This noted wheat farm is immediately adjoining the station of Casselton, twenty miles west of Fargo. It covers 10,240 acres, nearly in a compact body, and equal to a tract four miles square.

The surface of the land is nearly level, with but sufficient undulation to afford good drainage; the soil a rich, friable, black alluvial mold some thirty inches deep, resting upon a retentive clay subsoil. It is a magnificent tract of land, and almost every acre can be put under the plow in unbroken furrows from one end to the other. This is but the commencement of their second year's operations, and they now have 4,000 acres under cultivation, a field equal in size to one that is one mile in width by 6¼ miles in length. For this year's operations there are on the place 80 horses, 30 wagons, 40 cross-plows, 26 breaking plows, 21 seeders, 30 of the Wood self-binding harvesters, 60 harrows and 5 steam threshing-machines, each with a daily capacity of 1,000 bushels. Fifty men were needed during the seeding season, and at harvest time eighty were busily engaged. Seeding was commenced on the 9th of April, and completed on the 30th—all put in in 18 working days, at the rate of some 220 acres per day, averaging about 10½ acres per day to each seeder.

The buildings consist of 4 dwelling-houses, each 32x32 feet, and 4 barns, each 56x64 feet, with room in each for 60 horses, with commodious lofts, harness rooms, feed-bins, etc., beside necessary store-room for farming implements. In addition to these are the blacksmith and repair shops; also, a large store-house for grain, although it is intended to ship the bulk of the crop as soon as harvested. The management is good, and the most complete system seems to govern. Everything moves forward with regularity, and while there is liberal expenditure, yet there is every evidence of careful judicious economy in all pertaining to the work. Each department of work is under the care of a foreman, with a general superintendent over all, and the whole enterprise is under the direct personal supervision of Mr. Dalrymple, whose success in wheat-growing on a large scale in Minnesota during the past ten years is a good guarantee for the future success of this enterprise. The area for cultivation has been added to this year by the breaking up of some 3,000 acres of new ground, and will be enlarged every year, the intention of the proprietors being to have the whole 10,000 acres under cultivation during the year 1880—buildings, farm machinery and live stock to be added according to needs.

A careful examination of the 3,500 acres in wheat shows a uniform growth of about four feet of straw, heads from 2¾ to 3 inches in length, and berry of the usual small variety of our Northern spring wheat, but very plump and well developed, and will grade as extra No. 1 hard.

The work of harvesting was in full operation, twenty-five of the Wood harvesters with Lock's self-binding attachment being used, which were taking down the grain at the rate of 360 acres per day. The machines are of the large size, six and one half feet cut, drawn by three horses, and when pushed to their full capacity easily cut 15 acres per day, and have been driven up to 20. In all, eighty men are in the field, one driver to each machine, and two men following each, putting the bundles in shock, and the necessary foreman directing all.

The work is very systematically carried forward, the machines follow each other around the field about four rods apart, and if from any cause one has to stop it is at once turned from the ranks, and the next one following falls into its place. A helper, with a wagon carrying duplicate pieces of machinery, supply of binding wire, etc., is upon the ground, ready upon a display of a flag signal to go to the relief of any disabled machine, and put it in

working order without the delay of having to send it to a repair shop. Foremen on horseback follow the machines and men, keeping everything moving and preventing any unnecessary stoppage in the work. We timed a number of the machines, and found them cutting and binding from 15 to 18 bundles per minute, and during our four hours of inspection there was not a single break in the clock-like regularity of the work.

The cutting was commenced on the 8th of August and completed on the 23d, and on the following day the five steam threshing machines commenced their work.

[The entire crop from this immense field was threshed, sent to the Duluth elevators, and there transferred to steamers for shipment to New York by the 25th of September. The yield, as given by elevator weights, shows from one field of 2,315 acres, 57,289 bushels—an average of 25¼ bushels per acre; from another of 1,100 acres, 22,124 bushels—an average of 20¼ bushels per acre, and from 277 acres in oats the product was 14,320 bushels. The total amount of grain from the entire farm was 93,733 bushels.]

The Grandin Farm.

THE GREAT WHEAT FARM OF THE WORLD—AMOUNT IN CULTIVATION AND YIELD—MEN AND MATERIAL EMPLOYED, ETC.

This noted farm, owned jointly by J. L. and W. L. Grandin, of Tidioute, Pa., and Oliver Dalrymple, of St. Paul, covers 38,000 acres, embracing both railroad and government land, is located on and near the west bank of the Red River, some twenty-five miles north of Fargo. This large tract is to be devoted principally to the cultivation of wheat, and its development is now fairly under way, the statistics from it last year indicating somewhat its future.

The farm is practically divided into three parts, with dwelling houses, stables, granaries, blacksmith shops, wheat elevators, etc., the total stabling capacity being for 190 horses, and the granary capacity 65,000 bushels.

Last season there were 2,600 acres in wheat that produced 62,660 bushels, an average of 24 1-10 bushels per acre, all extra No. 1; 140 acres in oats, producing 11,287½ bushels, an average of 80 4-7 bushels per acre, of first quality, weighing 38½ lbs. per bushel.

Eighteen hundred acres of sod were turned over last year for wheat this season.

Last year's work employed 120 men, 130 horses, 21 16-inch breaking plows, 37 16-inch cross plows, 25 wagons, 40 72-tooth Orvis harrows, 16 Buckeye seeders, 8 feet gauge, 16 Wood's self-binding harvesters, 6½ feet cut, 4 largest size Buffalo Pitts separators, each of 1,000 bushels daily capacity, 5 Little Giant fanning mills, besides all other necessary equipments to conduct the business.

In addition to what the proprietors have in contemplation as to the improvement of this wheat farm, they have bought some 23,000 acres additional, to be used as a stock farm, which will be carried forward on the same extensive and comprehensive scale as their wheat farm.

On the farm of Hon. James B. Power, land commissioner of the company,

a field of 140 acres threshed out 3,990 bushels of wheat, being an average of 28½ bushels per acre. On 10 acres of this field the grain was very superior, and being separately handled exhibited a yield of 424 bushels, showing the splendid average of 42.4 bushels per acre.

There are many other individual samples of products ranging from 25 to 35 bushels of wheat and 60 to 80 of oats.

These are specimens of the capacity of the so-called arid and alkali lands which it was seriously proposed a few years ago to abandon to the Indians. The result there, together with Minnesota's 40,000,000 wheat products, is exhibiting this whole region in its true light, as more than the Egypt of America.

AN INTERESTING REMINISCENCE.

I do not know how I can better illustrate the great progress this State has made in rapid settlement and in the development of its great resources, than by stating that in the summer of 1851, I participated in hunting buffalo right over the ground now occupied by the Cass-Cheney and Grandin farms. The buffalo were in droves of countless thousands, and covered the prairie as far as the eye could reach. We had at times to make our way through them, scattering them as we proceeded. They were herded in places as thickly as droves of cattle are ever seen in passing through the streets of a crowded city. Now not a single animal is to be found till you reach the distant plains far west of the Missouri.

OATS.

Oats is peculiarly a Northern grain. It is only with a comparatively cool atmosphere that this grain attains the solidity, and yields the return which remunerate the labor and cost of production. The rare adaptation of the soil and climate of Minnesota to the growth of this grain, is shown not only by the large average, but the superior quality of the product, the oats of this State being heavier by from three to eight pounds per bushel than that produced elsewhere.

The following is an exhibit of the result for the several years named:

Year.	No. acres sown.	No. bushels produced.	Average yield per acre.
1868	212,064	7,831,523	36.00
1869	278,487	10,510,969	37.74
1870	339,542	10,588,689	31.02
1875	401,381	13,801,761	34.38
1877	432,194	16,678,000	37.75

The following is a statement of the product of oats in Minnesota, compared with that in the other States named:

	Average per acre.	Bushels to each inhabitant.
Ohio, average of 11 years	23.	9.17
Iowa	28.30	17.80
Minnesota	37.70	23.88

CORN.

The foregoing exhibits, abundantly sustain the extraordinary capacity of Minnesota for the production of those cereals which are best produced

in high latitudes. Our State is often supposed to be too far north for Indian corn. This is a great mistake, founded on the popular fallacy that the latitude governs climate. But climates grow warmer towards the west coasts of continents, and although its winters are cold, the summers of Minnesota are as warm as those of Southern Ohio. *The mean summer heat of St. Paul is precisely that of Philadelphia*, five degrees further south, while it is considerably warmer during the whole six months of the growing season than Chicago, three degrees further south. The products of the soil confirm these meteorological indications.

The average yield of corn in 1868 was 37.33 bushels per acre, and in 1875 —a bad year—25 bushels. In Illinois—of which corn is the chief staple—Mr. Lincoln, late President of the United States, in the course of an agricultural address in 1859, stated that "the average crop from year to year does not exceed 20 bushels per acre."

These results, so favorable to Minnesota as a corn growing as well as wheat growing State, will surprise no one who is familiar with the fact established by climatologists, that "the cultivated plants yield the greatest products near the northernmost limits at which they will grow."

COMPARISON WITH OTHER STATES.

A comparison with other States affords the following exhibit:

	Bushels per acre.
Ohio, average of nineteen years	32.8
Iowa, average of six years	31.97
Minnesota, average of nine years	30.98

In order to insure the fairness of this comparison, a just annual average is given, embracing such years as include both the highest and lowest known yield in each State named. The result is certainly a refutation of the notion that Minnesota is exclusively a wheat State, lying too far north for corn. She suffers little by this comparison with two of the representative corn States of the Union, and should suffer still less when it is remembered that the newer and more rapidly growing a State is, the larger is the proportion of corn planted by the newly arrived settler directly on the sod, in the rudest manner and without culture, from which process little more than a third of an average crop is ever expected. The average of the whole is thus reduced. With thorough cultivation, crops of 50 to 60 bushels per acre are obtained, while a yield of 75 to 80 bushels is not an unusual occurrence.

That the farmers of Minnesota are satisfied with their corn product is shown by the fact that the cultivated area in corn was over 163,000 acres more in 1877 than it was in 1876.

BARLEY.

The following extract from a circular of a grain shipping firm in Chicago, shows what judges of good grain think of the *quality* of our barley:

MINNESOTA.

"This State is renowned for *good* barley. Its latitude seems especially adapted to its finest development; its soil is fertile, and well tilled by

thrifty farmers; its climate is cool, allowing the grain to become plump and well filled before ripening, and is almost free from hot, sultry weather, and its tendency to *rust*. The barley is well cleaned before marketing, and usually weighs over 50 lbs. per bushel. When this State has a poor average yield of barley, *the remainder of the Western crop is not worth much.*"

So much as to the quality; for the quantity let the following figures speak. The average product compares with other States as follows:

	Bushels per acre.
Minnesota, average of five years	25.65
Iowa, average of three years	22.11
Ohio, average of nine years	19.29

In reference to the barley crop of Minnesota in 1875, it appears by the United States reports, that no State in the Union, except perhaps Texas, whose statistical reports are not remarkable for accuracy, had an average yield, equal to hers, in 1875.

The comparison is as follows:

Iowa	20 bushels.	Indiana	19 bushels.
Wisconsin	20 "	Illinois	17.5 "
Ohio	20 "	Minnesota	30.15 "

RYE AND BUCKWHEAT.

These crops are produced in great abundance and of the best quality in this State, but the far greater facility and profit with which more valuable products are grown, have caused a contraction of the area formerly assigned to their culture. The average product per acre in this and other States for a series of years will be seen in the following comparative statement:

	Rye.	Buckwheat.
Minnesota	19.20	16.40
Iowa	13.28	9.49
Ohio	10.43	10.97

POTATOES.

The well-known principle established by climatologists that "cultivated plants yield their greatest and best products near the northermost limits of their growth," applies with peculiar force to the production of potatoes. The mealy quality, the snowy whiteness, the farinaceous properties, and the exquisite flavor which distinguish the best article, reach perfection only in high latitudes. The potatoes grown in Minnesota are well known to be unsurpassed in all the qualities named, while their prolific yield is not less remarkable.

In the South, the potato, in common with other tuberous and bulbous plants, with beets, turnips, and other garden roots, is scarcely fit for human food. "A forcing sun," says Dr. Torrey, "brings the potato to fructification before the roots have had time to attain their proper size, or ripen into the qualities proper for nourishment."

Minnesota, at the West, reproduces the best northern samples of this delicious esculent, in characteristic perfection. From their farina and

flavor, the potatoes of Minnesota are already held in considerable esteem as a table delicacy in the States below us, and a market is rapidly growing up for them throughout the States of the Mississippi valley, as is indicated by increasing exports. The potato crop of Minnesota is remarkably exempt from the *rot* which often affects that of States south of us. Nearly three and one-half million bushels are produced annually. From 250 to 300 bushels to the acre are frequently obtained, while over 400, and even 500 bushels have been produced under favorable circumstances.

The average yield in Minnesota and other States is here shown:

	Bushels per acre.
Minnesota, average for five years	120.76
Iowa, average for five years	76.73
Ohio, average for nine years	74.55

HAY.—Among the grasses that appear to be native to the soil of Minnesota are found timothy, white clover, blue grass and red top. They grow most luxuriantly, and many claim that they contain nearly as much nutriment as ordinary oats. So excellent are the grasses that the tame varieties are but little cultivated. The wild grasses which cover the immense surface of natural meadow land formed by the alluvial bottoms of the intricate network of streams which everywhere intersect the country, are as rich and nutritious in this latitude as the best exotic varieties, hence cultivation is unnecessary. The yield of these grasses is 2.12 tons to the acre, or 60 per cent. more than that of Ohio, the great hay State!

SORGHUM.—The cultivation of the sugar cane is fast becoming popular among the farmers of Minnesota, and one, Mr. Seth H. Kenney, of Rice County, claims that it can be made more profitable than even the wheat crop. The syrup and sugar produced is of the finest character, possessing an extremely excellent flavor. An acre of properly cultivated land will yield from one hundred and seventy-five to two hundred gallons of syrup, worth 70 cents a gallon.

FLAX AND HEMP.—The lint plants, as they come to perfection only in a cool climate, do extremely well in Minnesota. Their bark in southern climates is harsh and brittle, because the plant is forced into maturity so rapidly that the lint does not acquire either consistency or tenacity. Minnesota is equal for flax and hemp growth to Northern Europe.

A very large amount of flax is grown in Minnesota, the extensive linseed oil works at Mankato, on the St. Paul & Sioux City Railroad, and at Minneapolis, paying the highest prices for it, and furnishing seed when desired.

ONIONS, TURNIPS, PARSNIPS, CARROTS, BEETS, and nearly all bulbous plants, do equally as well as the potato.

TURNIPS, RUTABAGAS and BEETS, often attain a great size.

THE SALAD PLANTS.—Cabbages, lettuce, endives, celery, spinach—plants whose leaves are only eaten—are not only more tender here than in warm climates, where the relaxing sun lays open their buds, and renders their leaves thin and tough, but are more nutritious, because their growth is slow and their juices well digested.

MELONS, although they come in rather late, instead of throwing too much

of their growth into the vine, as they do South, attain a large size and a rich, saccharine and aromatic flavor. This is especially true of the cantelope melon, which, in warmer climates, has its sides baked, or rots before it is fully matured.

PUMPKINS, SQUASH, &c., on the same principle, fully mature and grow very fine and large. The Hubbard variety requires early planting, say first of May.

BEANS, PEAS, &c., of every variety, are fine and prolific. Rhubarb, or pie-plant, flourishes without cultivation.

All kinds of garden vegetables are grown in great abundance, while the exquisite flavor and fresh crispness of all table esculents grown in the quick black soil of Minnesota is a subject of universal remark.

Perhaps in no State in the Union does the soil so surely and amply reward labor, or yield larger products for the amount bestowed on it. It is easily cleared of weeds, and once clean, its warm, forcing nature enables the crops to speedily outstrip all noxious growths. Two good, thorough workings usually insures a good growth of almost any cultivated crop.

The Grazing Interest in 1877.

Tons of wild hay	993,140
Tons of cultivated hay	155,000
Number of sheep	203,508
Product of wool, pounds	664,000
Number of milch cows	200,627
Pounds of butter	13,392,000
Pounds of cheese	1,150,000

The butter averages 67.6 pounds per head, against 52 pounds per head in Iowa, 46.8 in Illinois, and 62 in Wisconsin.

STOCK AND WOOL GROWING.

The cost of transportation which absorbs much of the profit of wheat culture in localities distant from the market, is forcing attention to the peculiar advantages of Minnesota for stock raising and wool growing. Prominent among these are: 1. The richness and luxuriance of the native grasses. The grass is mainly cut on the meadows which everywhere checker the rolling prairies, or fringe the countless streams and lakes. 2. The great extent of unoccupied land, affording for many years to come a wide range of free pasturage. 3. The remarkable dryness and healthfulness of the winter. The sleet, slush, mud, and the train of diseases which the damp and variable winters of Eastern or Southern climates inflict upon animals and men, are here nearly unknown. The cold, dry air sharpens the appetite, and promotes a rapid secretion of fat and a vigorous muscular development. The wool grows finer and heavier, and mutton, beef and pork sweeter and more juicy. The effect of the climate and the rich herbage is seen in the increased products of the dairy, as shown above, over those of any other Western State.

Cattle do well, without exception. Finer herds than those that graze

upon our prairies cannot be found in any land. Fat cattle find ready sale on the farm—you need not drive them to a market. You will find the drover at your door. To all farmers let me say that in looking for, as I hope, a *permanent* home, it is to your advantage to seek not only a good grain-growing country but also a good stock country. The people whose food is wheat bread, beef and mutton, rule the WORLD politically and mentally. The successful farmer must raise, not grain only, but horses, cattle, sheep and hogs. To do this, he must choose a country which produces cheap corn, and rich, nutritious and cheap grasses and hay. The test of actual experience is the only safe test of a stock growing country. We have had that experience, and can speak confidently.

SHEEP HUSBANDRY.

Even from the limited experiments made in this branch of farming, we say, without hesitation, that nowhere on the continent can there be found a more healthy climate for sheep than in this New Northwest. Shelter and feeding in winter will be needed, as in the Eastern and Middle States; but proper care and management is essential to success anywhere. Sheep thrive all through this section, and are not subject to foot-rot and other diseases prevalent in Ohio and Illinois, where the water is less pure, and the climate has a greater dampness. Sheep are adapted by nature to withstand cold; but they will not thrive in a drizzly winter or a hot summer climate; nor will they drink the water of muddy streams.

The experience of Col. W. S. King, of Minneapolis, best demonstrates the adaptability of our climate for this industry, especially with the finer breeds. Some six or seven years since he brought to Minnesota a small flock of a dozen Lincoln sheep. He has now, as lineal descendants of that flock, over 200, claimed by many as the best flock of long-wooled or combing-wooled sheep in the United States. During that time they have maintained those qualities in the clip that are so essential to the best types of combing wool, viz.: length, firmness, evenness of fibre, strength of staple, and a great degree of lustre. They have always been healthy and very large, and their yield of wool averages annually about eleven pounds each.

Last year Mr. King shipped his wool to Hill, Weston & Co., Boston, one of the most reliable and intelligent firms engaged in the wool business, and who handle millions of pounds annually. After a careful examination of the shipment, they wrote: "Your wool is well grown, and better blood than any wool of the class we have seen of American growth. It compares favorably with the full-blood wool we imported from Australia two years ago."

A. Wilson, Esq., of Richfield, Hennepin county, says, as comparing his experience in Vermont with that in Minnesota:

"In Vermont they were subject to diseases, would run down and degenerate in spite of all my efforts. In Minnesota, in 1865, I commenced with 30 ewes and one buck, full-blooded Spanish Merinos. From these have come the sheep which I have kept for the past thirteen years, and my present flock. I keep on an average 200. My success has been very

satisfactory. The following statements will give an idea of my success and profit:

I realize an average of eight pounds of wool per sheep.

In the spring of 1876, ten yearling ewes yielded one hundred pounds of washed wool.

Eight yearling bucks one hundred pounds of washed wool.

One 2-year-old buck sheared twenty-two pounds of unwashed wool.

One 3-year-old buck sheared eighteen pounds of washed wool, the heaviest washed fleece I ever heard of.

One 3-year ewe, with a lamb, thirteen pounds of washed wool, a very remarkable clip for a ewe with lamb.

I have sold buck lambs for $50 each, and yearling bucks for from $40 to $75.

Sheep of the right class, and properly kept, are more profitable than wheat. In comparing Minnesota with Vermont, I am of the opinion that Minnesota climate improves sheep. Last fall I visited many of the best flocks in Eastern New York and Vermont, for the purpose of comparison. I did not find anything superior to Minnesota sheep."

The exact cost of raising sheep in Minnesota is from 55 to 60 cents per head per annum. Counting the increased value of wool and mutton raised in this climate, and sheep raising is more profitable here than in Texas. They are almost wholly free from disease—the yearly loss from disease and casualty being only *one and one-half per cent.* Mr. Jonathan Ames, of Nobles county, an extensive stock raiser from Ohio, has a flock of one thousand, and declares that the grasses here are the best, richest, and most nutritious that he has ever met with.

SOUTHWESTERN MINNESOTA.

Southwestern Minnesota has made rapid progress in stock raising. As capital increases, and the utility and profit of stock raising becomes better understood by the farmer, we shall see fine flocks and herds, in addition to the fields of waving grain, and our rich prairies teeming with the life they can so amply sustain. The abundance of clear, sweet water, dry atmosphere, its elevation, rich pasturage, freedom from disease, and direct and ready access to all the prominent markets, unite to make Minnesota the paradise of stock raisers. Good hay can be put in the stack in South-Western Minnesota for $1.25 per ton. It can be secured without other expense than cutting, and with very little labor enough can be made for the maintenance of a large amount of stock. Cattle, horses, and sheep eat the wild hay with a relish, and we know of men who have sold numbers of beef cattle in the past five years who have fed their stock no grain, and turned it off in fine order. In the past few years they have operated entirely with beef cattle, and found it such a source of profit not only with themselves, but the farmers, who can raise stock with less labor and expense than grain, and are dependent almost wholly upon the natural grasses of the prairie. Butter and cheese are also made with large profit. This section has been settled but seven years, yet it is already teeming with a population of wide awake, industrious people, whose fields are evidences of the innate wealth of the region. The soil of South-

Western Minnesota is adapted to the successful cultivation of grain, and so celebrated has its grain producing qualities become, that capitalists have put their money into large tracts of land, and have now immense fields under cultivation, and their investments have proven extremely profitable. There are farms of 600, 1,000 and 2,000 acres, all producing Minnesota's great staple, wheat. Every year, as the success of these investments becomes known, new and larger farms are opening. Men of wealth have found a safe and reliable investment in practical farming. No notes becoming due, no mortgages to foreclose, no arrearages in interest, in these investments.

FRUIT—well, all kinds that are raised in any northern latitude can be raised in this locality. Some parties raise thousands of pounds of grapes the next season after setting out the vines. Of course, the culture of fruit, like anything else, depends very largely upon the care and attention given to it, but there is no reason why all the hardy varieties cannot or will not thrive here.

Southwestern Minnesota is on the move, and those who wish to locate in a thriving, driving, pushing, growing country, no locality on the green earth promises more faithfully, and none will redeem its pledges with greater pride to the wide-awake, stirring husbandman. The very soil teems with wealth, and the air is laden with the most precious gifts of health.

Another Rich Section of Country.

South, southwest, west and northwest, of Lake Osakis, and the chain of lakes which give rise to the Sauk River, and embracing the section comprised in the western portion of Stearns County, west of Sauk Centre, and the counties of Pope, Douglas, Stevens, Grant, Otter Tail, &c., westward, lies a splendid farming and grazing country.

This whole section is naturally adapted to a varied agriculture—grain and stock raising. The wheat lands are equal, if properly cultivated, to any in the State. Great crops have been produced. I have no individual cases of successful culture at hand, or I should take pleasure in giving them. The natural meadows and the lake system, with connecting streams, afford unusual advantages for stock raising. Cattle, including two-year-old heifers that have been running wild all winter, seeking their own subsistence, are now, April 20th, in excellent condition for beef.

Most of this section is extremely rich in natural provision for this varied agriculture, which enables the farmer to keep his land in condition, instead of exhausting it by the process of perpetual cropping with grain while returning nothing to the soil. A large portion of the State may perhaps stand this everlasting cropping process as in the case of the pioneer farmer, Mr. Joseph Haskell, of Washington County, mentioned on page 21, but I would not advise any one to keep it up forever.

The soil generally is of excellent quality. A heavy sandy loam, with

clay subsoil, forming land which the government surveyors truthfully described as No. 1, and which will produce excellent crops of all kinds for years in succession without fertilizers.

In digging a well some years ago the soil was found to be rich and black to the depth of *five feet*. The next thirteen feet, the full depth of the well, consisted of black loam, partly mixed with clay, but not in sufficient quantity to cause the pile of earth thrown out to bake after the lapse of years. I might add here that the soil of Minnesota never bakes or heaves. The surface of nearly all of this whole region, especially Douglas County, is thickly dotted with beautiful lakes; while the water powers at Sauk Centre, and Fergus Falls, in Otter Tail County, is only excelled by those of greater volume previously mentioned. Excellent improved farms, all, or part of them fenced and broken, with buildings and every essential requisite to putting in immediate crops, can be obtained cheap of those who have encumbered themselves with more broad acres than they can manage, or who have unwisely bought more harvesters, fanning mills, &c., than they can pay for.

The branch line of the St. Paul & Pacific Railroad has been graded to Fergus Falls, the county seat of Otter Tail County, and will be extended by the 4th of July, 1878, from Melrose, its present terminus, 38 miles to Alexandria, the county seat of Douglas County.

Wild fruits are abundant everywhere. Considerable quantities of wine are made from the native grape. Thousands of bushels of sweet wild plums may be gathered in the groves and along the road sides. Strawberries, raspberries, gooseberries, currants and Juneberries, are excellent in quality and exhaustless in quantity. The finest cranberries grow on the natural marshes. Of hazel nuts there is no end; hazel bush always denotes excellent land. The apple and other tame fruits are also grown.

From the thousands of acres of heavy maple forests, both of the hard and soft varieties, large quantities of syrup and sugar are made. These forests also yield choice lumber for building and the manufacturing of furniture. Here then, in nearly the centre of the foremost State in the West or Northwest, is a tract of country that is rich in every essential requisite, with comparatively few of the hardships incident to a life on the frontier.

It offers to farmers with small capital good farms, pleasant homes and opportunities of successful business, and to capitalists the pleasant task of building up a new country and reaping large profits. It is certainly one of the most beautiful portions of the great "*Park Region*," and is the section of country so enthusiastically described by General Pope and "Carlton," in the chapter on the

BEAUTY AND FERTILITY OF THE STATE.

I also had the rare good fortune to accompany the second Government expedition through this same region in the summer of 1851. Our objective point was Pembina and incidentally Selkirk settlement, in what is now the province of Manitoba. The result of our mission was a treaty formed with the Pillager Chippewas and Half Breeds for the valley of the Red River of the North. The country—the buffalo hunting and bear chasing, at times performed in a two horse carriage—I described at the time in a series

of "Camp Fire Sketches." Hon. Alexander Ramsey, then Governor of the Territory, and since U. S. Senator from this State, was in command of the expedition.

Southern Minnesota—The Garden of the State.

It only remains to say a few words in conclusion in regard to that immense region of old settled country, known as "*Southern Minnesota.*" As the dessert of the feast naturally comes last, so now do I sum up the feast of good things this State affords by a brief reference to what has always been considered the very heart and garden of the State, All then that I have said upon our agricultural interests, and of stock and perhaps wool growing, in other regions, applies with equal force to the whole country south of the Minnesota and west of the Mississippi river.

THE GREAT WHEAT COUNTIES

which produced in 1876 (the only year that there ever was a *failure* of our wheat crop) over half a million bushels of wheat each, are only twelve in number, and are all comprised within this region. They are Blue Earth, Dakota, Dodge, Fillmore, Freeborn, Goodhue, Mower, Olmsted, Steele, Wabasha, Winona, and Houston. Four of them, Fillmore, Goodhue, Olmsted, and Winona, produced over one million each. While the average of the State for 1876 was only 9.61-100 bushels, these twelve counties averaged 10.03 bushels.

THE INCOMPARABLE WHEAT COUNTIES

of the State are six only, whose average per acre for that disastrous year, was as follows: Winona, 12.50½; Olmsted, 10.94½; Freeborn, 10.90½; Fillmore, 10.66; Goodhue, 10.62½; Steele, 10.06. The average per acre of ten of the above twelve counties (I have not the other two at hand) for the year 1875, when we had just a fair average crop throughout the State of 17.05 bushels, was as follows, viz:

Dodge, 18.90; Steele, 19.26; Goodhue, 21.08; Fillmore, 18.02; Wabasha, 18.06; Olmsted, 19.64; Dakota, 16.62; Winona, 17.55; Mower, 18.71; Freeborn, 19.61. Average of all, 18.74½. For 1876, 10.03. Showing a difference of 8.71½ bushels per acre as the average loss sustained by the entire wheat area of the State in 1876 from unusual climatic causes.

The acreage in wheat of the twelve counties in 1877 was 1,107,070 acres—the product—at only 22 bushels to the acre—the average for the whole State, would be 24,355,540 bushels, considerably over half the acreage and half the product of the entire State. To men of moderate means and men of wealth, who wish to purchase highly cultivated farms, all ready to their hand, who prefer an old settled and populous country, fairly gridironed with railroads (many of whose worthy people already have the land fever and are full of "homestead," "pre-emption" and "timber culture," and want to "go West"), to all such men *Southern Minnesota* offers inducements and advantages and attractions that no other part of the State can equal, including the splendid water power at Cannon Falls and elsewhere.

I have faithfully endeavored, without any bias or self interest, to do equal and exact justice to every part of this great commonwealth. To do this conscientiously is a work requiring great thought and labor. For three months past I have made diligent and careful research and investigation into every leading interest of the State; I have made every document, newspaper and individual possessing information, that I could put my hand upon, pay tribute. Every statement made comes from the very best sources, and is entirely reliable.

In concluding this great and remarkable chapter, I give the acreage of the seven leading crops as follows: Wheat, 1,819,761 acres; oats, 441,934; corn, 458,125; barley, 92,689; potatoes, 35,449; rye, 10,570; buckwheat, 7;864. Total, 2,866,392 acres. The total product of all crops and miscellaneous productions for 1877—exclusive of those items heretofore given under the title of "The Grazing Interest"—is as follows: Wheat, 40,000,000 bushels; oats, 16,678,000; corn, 12,827,000; potatoes, 2,700,000; barley, 2,325,000; rye, 200,830; buckwheat, 136,170; grand total of seven crops, 74,867,000 bushels, worth at home sixty million dollars. Also white beans, 16,450 bushels; hops, 34,000 pounds; amber cane syrup, 108,000 gallons; flax seed, 60,613 bushels; clover seed, 5000; Timothy, 85,000; tobacco, 45,000 pounds; strawberries, 250,000 quarts. Apple-trees growing, 831,879—number bearing fruit, 158,923, producing 150,000 bushels. Grape-vines in bearing, 31,749. Honey, 100,000 pounds; maple sugar, 20,000; maple syrup, 6,182 gallons. Cheese factories, 46; nurseries, 47; farms, 57;104. Forest trees planted on Arbor Day, 1877, 442,568. Whole number planted in 1877, 4,466,371. Whole number planted and growing, 28,602,566.

The following table needs no comment:

	1860	1865	1870	1877
Population	172,000	250,000	440,000	675,000
Schoolhouses	800	1,112	2,000	3,141
Scholars	37,000	50,564	112,000	162,551
Railroads, miles	.....	210	1,088	2,225
Flour, value	$1,289,665	$3,187,429	$6,982,959	$15,565,000
Lumber, value	$1,405,303	$2,510,254	$5,058,158	$8,968,000
Manufactures,	$3,373,172	$9,714,147	23,396,097	42,636,000
Wheat, bushels	5,101,432	9,475,000	16,283,000	40,000,000
Corn, bushels	3,143,577	2,400,000	6,092,230	12,827,000
Oats, bushels	2,900,000	4,000,000	10,588,680	16,678,000
Potatoes, bushels	2,303,308	2,401,654	2,500,000	2,700,000
Barley, bushels	301,539	312,000	1,603,686	2,325,000
Horses	16,800	52,058	102,600	209,141
Cattle	106,000	202,730	294,500	584,483
Sheep	12,500	161,187	136,000	203,508
Hogs	104,467	74,118	112,000	211,041

A WORD TO EASTERN FARMERS.

It has been ascertained from statistical data that there are now over 2,800,000 men in the United States at work on farms as farm laborers, who

do not own a foot of land. The great majority of these men have the experience, energy and ability to manage small farms of their own. Many of them have families. By dint of close economy, they have saved from their wages a small capital, which in the West would be sufficient to give them a good start, but in the older sections of the country, where they live, with land at from $50 to $150 per acre, it is beyond all hope of their ever securing a homestead there. At the best, their future promises only a life of hard labor, and at the end, when incapacitated from work by old age or other cause, their little savings will soon be exhausted, and they are left dependent upon the help of their friends or the charities of the public, and their children have nothing left them but the laborer's heritage.

This amount of labor for others, and for which they get but small wages, would, if put on an 80 or 160-acre farm of their own, give them rich returns and a comfortable home for themselves in old age, and when they are gone, a valuable property for their children.

Minnesota as a Great Lumber Region.

LOGS AND LUMBER.

The head waters of the Mississippi, St. Croix and St. Louis Rivers, and their numerous tributaries are covered with vast forests of pine. The entire valley of the Mississippi and a vast treeless country westward are dependent upon these forests for their lumber.

The annual cutting of logs and mauufacture of lumber, constitute, therefore, an important branch of industry, affording an extensive field for the employment of men and capital.

The mild, open winter of 1876–7 prevented lumber manufacturers from securing the usual supply of logs, consequently the cut of lumber and shingles was much smaller in 1877 than 1876. The same causes operated in all the lumber districts of the northwest, especially in Wisconsin, and all streams tributary to the Mississippi River. The lack of snow in the winter was followed, during the summer, by a low stage of water in all the logging streams. As a consequence, a large per centage of the logs cut and put into streams, ready for the spring drives, were hung up, and the manufacture of lumber, on the Mississippi river and its tributaries, was very small. This tended to strengthen the market, and in the middle of the year prices were advanced, and at the close were some $3.00 to $4.00 per thousand higher than at the commencement of the year. This advance in price has more than compensated the dealers and manufacturers for the small cut in 1877, and relieved the yards from accumulated stocks, caused by over-production in former years.

The amount of lumber manufactured in 1876, in the North Mississippi District, was 244,800,000 feet; 105,000,000 shingles, and 50,000,000 lath. In the St. Croix District, 281,750,000 feet, and in the Duluth District 27,750,000 feet. Total in these three districts, 554,300,000 feet; worth at the mills not less than eleven million seven hundred and fifty thousand dollars.

Outside of these districts which comprise or are tributary to the pine regions, there are numerous mills all over the State, the exact product of which I have no means of ascertaining.

Vast pine forests are found on the shore of Lake Superior, on the head waters of the Red River, and along the numerous streams which feed its waters, and operations scarcely now begun will soon be carried on in those regions upon an extensive scale.

Beauty and Fertility of the State.

In Minnesota are found neither the illimitable level prairies which distinguish Illinois, nor the vast impenetrable forests of Indiana and Ohio, in which the settler finds it so difficult to carve himself a home; but a charming alternation of woods and prairie, upland and meadow, characterize the topography of this State.

The general surface of the country is undulating, similar to the rolling prairies of the adjoining States of Iowa and Wisconsin, with greater diversity, beauty, and picturesqueness imparted to the scenery by rippling lakes, sparkling waterfalls, high bluffs and wooded ravines.

To the general evenness of the surface, the high lands known as the *Hauteurs des Terres*, form the only exception. These are a chain of drift hills in the northern part of the State, commonly with flat tops, rising from 80 to 100 feet above the level of the surrounding country. Among these hills lie embedded the lakes that give rise to the three great rivers of the continent. The Mississippi, pursuing a southward direction, over ledges of limestone, through fertile prairies and rich savannas, gathering its tributaries from a country of great fertility and nearly equal in extent to one-third the area of Europe, pours its waters into the Gulf of Mexico. Eastwardly, through lakes, rivers and foaming cataracts, flow the waters of the St. Lawrence system, finding their way into the Atlantic. Northward runs the Red River, by a circuitous route to Lake Winnipeg, where it mingles with waters brought from the Rocky Mountains by the Saskatchewan, and rolls onward to Hudson's Bay.

Three-quarters of the State may be generally described as rolling prairie, interspersed with frequent groves, oak openings, and belts of hardwood timber, watered by numberless lakes and streams, and covered with a warm, dark soil of great fertility.

OFFICIAL AND SCIENTIFIC TESTIMONY.

General, then Captain, Pope was commissioned in 1849 to make a topographical survey of Northwestern Minnesota. In his official report to Congress he used the following glowing language touching the beauty and resources of that region:

"I have traversed this territory from north to south, a distance of 500 miles, and with the exception of a few swamps, I have not seen one acre of unproductive land." Again: "The examination of a portion of this territory during the past summer has convinced me that nature has been

even more lavish in her gifts of soil than in her channels of communication."

"I know of no country on earth where so many advantages are presented to the farmer and manufacturer."

"In this whole extent it presents an almost unbroken level of rich prairie, intersected at right angles by all the heavily-timbered tributaries of the Red River, from the east and west—the Red River itself running nearly due north through its centre, and heavily timbered on both banks with elm, oak, ash, maple, &c., &c. This valley, from its vast extent, perfect uniformity of surface, richness of soil, and the unlimited supply of wood and water, is among the finest wheat countries in the world."

Of the region surrounding Otter Tail Lake the same writer says:

"The whole region of country for fifty miles in all directions around this lake, is among the most beautiful and fertile in the world. The fine scenery of lake and open groves of oak timber, of winding streams connecting them, and beautifully rolling country on all sides, renders this portion of Minnesota the garden spot of the Northwest. It is impossible in a report of this character, to describe the feelings of admiration and astonishment with which we first beheld the charming country in the vicinity of this lake; and were I to give expression to my own feelings and opinions in reference to it, I fear they would be considered the ravings of a visionary or an enthusiast."

"Carlton," of the Boston *Journal*, who accompanied the party who examined the route of the Northern Pacific Railroad in July, 1869, speaks thus of a portion of the same section of country:

"On our second day's march we came to a section of country that might with propriety be called the park region of Minnesota. It lies amid the highlands of the divide. It is more beautiful than even the country around White Bear Lake and in the vicinity of Glenwood. Throughout the day we ride amid such rural scenery as can only be found amid the most lovely spots of England.

"So wonderfully has nature adorned this section, that it seems as if we were riding through a country that has been long under cultivation, and that behind yonder hillocks we shall find an old castle, or at least a farm house, as we find them in Great Britain."

"I do not forget that I am seeing Minnesota at its best season, that it is midsummer, that the winters are as long as in New England; but I can say without reservation that nowhere in the wide world, not even in England, the most finished of all lands; not in *la belle France*, or in sunny Italy, or in the valley of the Ganges, or the Yanktze, or on the slopes of the Sierra Nevada, have I beheld anything approaching this region in natural beauty."

"How it would look in winter I cannot say; but the members of our party are unanimous in their praises of this park region of Minnesota. The land is unsurveyed, and the nearest pioneer is forty miles distant, but land so inviting will soon be snapped up by settlers."

Of the Red River Valley the same writer says:

"The sun shines through a mellow haze, while all around, as far as the eye can see, there is such richness of verdure, such wealth of greenness and display of flowers, that the language descriptive of the Elysian fields, and the choicest and best of poesy, is too forceless and feeble to convey an idea of the richness and beauty of this fair region of the world."

David Dale Owens, the eminent geologist, speaking of Southern Minnesota, designates it as a "fertile, well watered and desirable farming country." The same writer, describing another portion of the same section, says:

"The scenery on the Rhine, with its castellated heights, has been the admiration of European travelers for centuries. Yet it is doubtful whether in actual beauty of landscape it is not equalled by that of some of the streams that water this region of the far West."

G. W. Featherstonhaugh, an English traveler, in 1835, in his "Report of a Geological Reconnoissance," speaks of this valley as "extremely beautiful—charming slopes, with pretty dells intersecting them, studded with trees as gracefully as if they had been planted with the most refined taste."

Prof. Owen, speaking of the Lake Superior region, says:

"The scenery of the whole extent of the ranges north of the lake is bold and picturesque."

Major Long, of the U. S. Army, speaks of the scenery of the Mississippi as "bold, wild and majestic," and describes one of the falls on the north shore of Lake Superior as

"Equalling Niagara in the grandeur and sublimity of its scenery, although less extensive, the fall being 130 feet, but with features equally terrific—the deep intonation more sensible and having a nearer resemblance to the roar of distant thunder and the rumbling of an earthquake."

The "Dalles" of the St. Croix River are every year attracting tourists in increasing numbers by their wild and picturesque beauty. The falls of Minne-ha-ha, the "laughing waters," have been so immortalized by Longfellow's "Hiawatha" as to require no description; while also the beautiful cascade, "Minhe-inne-opa," near Mankato, elicits expressions of admiration from delighted visitors. Scores of other rare features might be named which contribute to the charms of our scenery.

As a concise general description of the landscape of Minnesota, it may finally be said that the number and beauty of its groves and belts of timber, which crown the undulations of the uplands or shadow the margins of the streams, break up the monotony of the prairie into forms of infinite variety and beauty, and unite all the elements not only of successful husbandry, but of delightful landscape in the limits of almost every farm.

LAKES.

The number, beauty and picturesqueness of its lakes form a marked feature in the scenery of Minnesota. These lovely little sheets of water are found dotting its surface in nearly every section of the State, sparkling on the open prairie, hidden in the depths of its primeval forests, and glistening like gems of beauty among the ragged hills of its northeastern section. They are from one to thirty miles in diameter. Some of them are of a circular form, others of an exceedingly irregular outline. The water of these lakes is remarkably clear and pure, resting upon a basin of quartzose sand and pebbles, among which the jasper, agate and cornelian appear conspicuous. Some of these lakes are surrounded by hard, gravelly shores; others encircled by an embankment several feet high; around some the greensward touches the water's brim; others are fringed with wild rice and various aquatic plants of rare beauty. These lakes abound with a great variety of fish of superior flavor and quality; and in spring and autumn they are the resort of immense numbers of wild geese, ducks and other water fowl. I am indebted to Gen. J. H. Baker for the following:

OF THE DISTRIBUTION AND USES OF LAKES.

"The lakes of the world are not distributed at random, but are developed in certain regions by causes which are pretty well understood. The northern parts of Europe, down to the 52d parallel of latitude, are well dotted with lakes; in the northern parts of America they only extend as far south as the 42d parallel. In Finland, nearly one-third of the country is water. In the northwest of Scotland scenery and lakes similar to that found in the northeast of our own State and Canada exist. The lochs of Scotland and the loughs of Ireland have touched with beauty both the poetry and romance of those countries. Lakes are numerous also in Switzerland, Bavaria and the south of Sweden. But the most remarkable lakes in the world are those of the northern continent of America.

"This vast mass of fresh water, so far inland, subserves many important purposes. It has a marked climatic effect, as shown by the excellent fruit districts around lakes Erie, Michigan, and Huron, where peaches and grapes ripen to exquisite sweetness north of their normal latitudes. They affect our own climate by retarding the early approach of frost in the autumn. They subserve a noble purpose by bottling up the mighty volume of waters which gather from the great rains and melting snows. They spread this water over vast areas, and pass it gently from basin to basin: whereas, if it rushed at once to the declivity of rivers, it would overflow whole regions, and carry devastation in its march. They also serve as the reservoirs for innumerable springs. Besides serving these functions, they add an indescribable charm and picturesque beauty to the landscape. They have made Switzerland the home of the tourist, and the lochs of Scotland the synonym of romance. In time the lakes of Minnesota will do all this for us. The disciples of Isaac Walton will here find their choicest field, and the hunter multitudes of aquatic fowl. The sports of the regatta, with oar and sail, will give diversion and health. Thus our seven thousand lakes will furnish lasting resources of amusement and health, and add forever an indescribable charm to our natural scenery."

TIMBER.

As before remarked, Minnesota is neither a timber nor a prairie State; yet it possesses, in a large degree, the advantages of both, there being unquestionably a better proportion of timber and prairie, and a more admirable intermingling of the two, than in any other State. It is estimated that about one-third of Minnesota is timbered land, of more or less dense growth, being the best timbered State of the Northwest. On the head waters of the various tributaries of the extreme upper Mississippi and St. Croix rivers is an extensive forest country, known as the "pine region," comprising an estimated area of 21,000 square miles. Extending in a northeasterly and southwesterly direction, about 125 miles long and an average width of 40, is the largest body of hard wood timber between the Mississippi and Missouri rivers. It lies on both sides of the Minnesota river, comprising in all an area of 5,000 square miles, and is known as the "big woods." This extended forest abounds in small lakes, and in some portions it is broken by small prairies and openings, covered with a luxuriant growth of grass. Elsewhere timber is found in detached groves, and bordering the numerous rivers and lakes, and a scattered growth of stunted trees called "oak openings" usually skirt the prairies.

GAME.

The prairies and forests abound in a great variety of wild animals, among which are deer, bears, wolves, foxes, wild-cats, raccoons and rabbits. Otter, mink, beaver and musk-rat are the principal aquatic animals that frequent the water-courses. Pigeons, prairie chickens and pheasants are among the feathered game; whilst multitudes of smaller birds, of sweet song and gay plumage, add their thousand charms to the summer landscape of Minnesota.

FISH.

The Legislature, some three years since, established a "*State Board of Fish Commissioners*," in common with many other States. The present Board consists of Robert Ormsby Sweeny, of Saint Paul, Chairman, Dr. W. W. Sweeney, of Red Wing, Goodhue County, and one vacancy to be filled by the Governor. A Fish Hatchery has been established at Willow Brook, at the base of the high bluffs on the left bank of the Mississippi just below Saint Paul. Young salmon and trout are being propagated by the million in the pure spring waters which flow from the high grounds in this vicinity. An appropriation of $5,000 per annum has been made for the support of this new State enterprise, and to Messrs. Wm. Golcher, of Saint Paul, a late commissioner, and R. O. Sweeny, great credit is due for the zeal and energy they have displayed in giving it practical shape and utility. The Chairman of the Board furnishes me the following statement. It possesses peculiar interest. Should a drouth or general failure of crops ever take place, the fish supply of the State would go far towards subsisting the people;

"There is no State of the Union more bountifully beautified with clear deep lakes and spring brooks and rivers than Minnesota. The lakes and streams are sources of food for the dwellers of this favored land, for they abound in choice varieties of native fish, and those planted by the Fish Commissioners of the State; so that, should all else fail the fisheries of the State alone would support a heavy population.

A careful estimate taken from township maps of the State shows that we have, of inland lake surface (exclusive of rivers, and portions of Lake Superior and Lake Pepin), within our borders no less than 2,700,000 acres of inland lakes alone. Assuming that our State contains 83,530 square miles, or 53,459,840 acres, it will be seen that we have five acres of water to every hundred acres of land. The capacity of this vast water surface to produce food is practically unlimited.

The Fish Commissioners have in the three years of the labors of the Commission, planted in the different waters of the State nearly a million of young fish of the following varieties—California Salmon, Land-locked Salmon of Maine and Atlantic Salmon, Great Lake Superior Trout, Brook Trout and Shad. The latter from the United States Hatchery and Commissioner.

The native fishes of superior merit are the white fish, tulabee, lake herring, brook trout, wall-eyed pike, bass, croppy, perch, Great Lake trout, siskowet, pike musquealonge and pickerel. Some of these kinds are to be found in nearly all parts of the State, affording attractive sport and good food to those who can 'be quiet and go a-angling.' There are many more kinds than are enumerated above, in great abundance, and many who catch fish esteem them highly and eat them with relish."

A Peep at Minnesota.

From the Chicago Tribune.

For the first time in years I find myself outside the walls of Chicago, and the change is a most striking one.

The growth and rapid development of this State is one of the marvels of modern times. In the year 1852 the writer of this first visited St. Paul, a small town then of about 2,000 inhabitants. It has now 40,000! The entire Territory of Minnesota (which included the present State and the present Territory of Dakota) did not at that time number more than 15,000 inhabitants.

The State alone has now a population of nearly, if not quite, 750,000.

Then we were all speculators. There were no farmers in the country. The Territory did not raise grain enough for its own consumption. Wheat and all other produce was much higher in St. Paul than in Chicago.

We were all dealers in town lots, and thought in our foolishness that the cultivation of the soil was a slow way of getting rich. But opinions change as we get older, and the circle of experience widens. Speculation nearly ruined Minnesota, or seemed to do so. It certainly ruined the speculators, and brought all their golden plans to grief. Then everybody went to work, and slowly but surely recuperation went on. The patient has now fully recovered, and is at present in a most healthy and vigorous condition.

There is no young State which to the emigrant offers such substantial inducements as this. And they are fast finding it out. The tide of emigration is setting powerfully in this direction, and is every day gathering volume and force. It is natural that this should be so.

The fame of last year's crop has gone abroad, and the present movement is the logical result. Think of a State barely twenty years old producing in one season a crop of 40,000,000 bushels of as pure wheat as was ever raised. Grasp that fact, and then call upon your imagination to aid you in predicting the destiny of such a State—a State about twice the size of New York—with millions of acres of fertile land never yet vexed with a plow, and possessing a climate unsurpassed in salubrity.

No wonder the people here wear such smiling countenances. They are full of hope. I have yet to see the first despairing or gloomy face. Melancholy belongs to the overcrowded cities, and there is plenty of it in Chicago.

Is it not astonishing that so many able-bodied men should hang about our large cities doing nothing, because they can find nothing to do, and nearly starving to death, when these broad and fertile prairies are calling upon them to come and release the treasures which lie within the soil.

The resources of this State are immense. It has every variety of wealth, and every facility for profitable exchange. There is no more productive soil in the world. Then the State has an abundance of pine timber. It has a vast amount of available water power, and offers every facility and encouragement to manufacturing industry. It has mineral wealth on Lake Superior of iron and copper in inexhaustible abundance. There is no region in this country or any country that I am aware of, that is so well watered. And the water is everywhere clear and pure. It is a land of great rivers, pelucid lakes, and sparkling streams.

All this may sound enthusiastic, but every word is called for, written and justified by the facts; and it is strictly within the facts. If the advantages of this region were only adequately made known, there would surely be a great flow of labor from the cities and places where it is not wanted,

into a region like this, where every variety of labor is needed and where it is certain to meet with a rich reward.

It would afford me pleasure to say much more, but I am afraid to trespass farther upon your attention at present, and I will simply subscribe myself as yours respectfully,

An Agricultural Paradise.

From the Chicago Tribune.

I write this from one of the centres of agricultural Minnesota,—from the heart of an agricultural paradise. Mankato is 135 miles nearly west from Winona, and about 435 miles from Chicago. It is an easy and comfortable trip throughout, and those who make it, if only for pleasure, will be well rewarded. A more attractive and beautiful country than that which lies along the line of the Northwestern railroad, from Winona to this point, I have never seen. It is a perpetual feast for the eye. It is not only a garden in the way of fertility, but there is a variety, a finish, a picturesqueness about it which is as surprising as it is pleasing. It is difficult to realize that this is a newly settled region, and that but a few years ago these now highly cultivated lands were in a state of primeval wildness—the hunting grounds of savage tribes.

The change that has been wrought within a single decade in Minnesota borders upon the miraculous. Within ten years this wonderful State has doubled in population and quadrupled its wheat production, and the development of its resources has only just begun, as even the most skeptical will be convinced who will take the pains (and it will not be a pain, but a pleasure) to visit this State and acquaint himself with the actual facts. They will, I am sure, fully bear out any statements that I have yet made, or am likely to make. If the facts are as I have represented them, then there can be no doubt that they should be given the very widest circulation, and that every journal which aids in this work will be doing the community a service.

The growth of Minnesota—the creation of wealth from its soil—will of necessity add incalculably to the solid prosperity of Chicago. It will add, moreover to the prosperity of the whole country. It is upon these broad, general grounds that these letters are written. Minnesota has within her limits riches far greater in value, and far more essential to the welfare of man, than can be found within the limits of any mere gold-producing State. The wheat of Minnesota, the finest in quality that can be raised, will command its equivalent in gold in any of the markets of the world; and for the production of this staple, the result of last year's crop proves beyond a question that Minnesota has no peer. This may sound very much like "blowing," but it is blowing only the truth. The writer is not a resident of Minnesota, and does not own an acre within that State; and, even if he did, it would be but futile to attempt to alter facts. Facts are hard things against which to butt one's head. But when the facts are in our favor, as in this case they certainly are, then it is not only a pleasing task, but it is one's duty, to give to them the fullest expression.

I have no[t] to go into statistics, which are dull things at best, although [i]t with meaning; but, for such as care to do so, I will refer the[m] able report of Mr. Metcalf, Commissioner of Statistics for the Sta[te] Minnesota. They will find in that work much to astonish them, and [will] furnish their minds with food for thought.

Minneso[ta] all respects extraordinary, and in the future it is my

belief that she will surprise the country even more than she has done in the past.

I know of no other portion of the earth's surface where so many advantages are concentrated, and where the man of industry and small means may so quickly and with so much certainty render himself independent. Here you have a climate of exceeding purity, a soil of amazing productiveness, abundance of the clearest water, with groves, and lakes, and rivers and streams wherever they are wanted. Then the great railway lines are beginning to intersect this country in all directions, and thus furnish the farmer with a cheap and immediate outlet for his produce.

What more can be desired? How can there be a combination more favorable for the creation of wealth?

Land is now cheap, abundant, convenient; and it is rapidly being taken up. The emigration that is now pouring into this region proves that the facts here alluded to are become known. And, as they become better known, this human stream will grow larger and larger, until every available acre in this fertile State is brought under the civilizing influences of the harrow and the plow. With much respect, your wandering fellow-townsman,

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Minerals.

The northeastern corner of the State comprises a mineral field which will be inferior only to agriculture as a source of wealth.

COPPER.—Copper abounds in the mineral belt stretching along the northern shore of Lake Superior; and large masses of the pure metal have been taken from Knife and Stuart rivers.

The lower magnesian limestone and sandstone near Lake Pepin are metalliferous, yielding lead and copper. But no mines as yet have been attempted.

IRON.—Iron ore is found in considerable quantity around Portage and Pigeon rivers. The metal wrought from this ore has been put to the severest test, and found fully equal in tenacity and malleability to the best Swedish and Russian iron. The growing importance of this mineral resource may be inferred from the table of shipments of iron ore from the Superior district, which shows a rapid increase.

An iron ore is also found in several localities, between the Blue Earth and Le Sueur rivers, which is said to yield thirty-one per cent. of light-grey iron.

COAL.—Should Minnesota prove to be wanting in this valuable mineral, the deficiency can shortly be supplied at a cheap rate from the immense coal fields of Iowa. These fields cover an area of 25,000 square miles; and the Minneapolis & St. Louis Railroad places them practically in the neighborhood of the mineral districts of Lake Superior.

SLATE.—Vast bodies of slate of good quality exist in some portions of the State.

LIME.—The burning of lime has been pursued to a large extent from the first settlement of the State, the extensive beds of stone everywhere found affording abundant material for its prosecution on a large scale.

SALT.—Among the valuable mineral resources of this State are the salt springs of the Red River Valley. These reservoirs of salt are the beginning of a series of saline springs that reach westward on the international bound-

ary line to the Rocky Mountains; some of these springs, even with the imperfect apparatus used by the Indians, are said to yield one bushel of good salt to twenty-four gallons of brine, or 33½ per cent.

BUILDING STONE.—Limestone suitable for building purposes, is found in immense out-croppings below the Falls of St. Anthony, on the Mississippi and its tributaries, which forms another considerable item of wealth. That nearest the surface is of a greyish rock, easily quarried and worked, but incapable of a high polish. Underlying this formation, in many localities, is a close-grained limestone of a bluish color, highly valuable for building purposes. A variety occurs at Saint Peter, resembling marble, and susceptible of a fine polish.

The limestone near the mouth of the Cottonwood contains ninety-four per cent. and that near the mouth of the Minnesota sixty-four per cent. of the carbonate of lime; and indeed all these formations are rich in this element, and consequently valuable for building.

Within the past few years the ledge of granite which makes its appearance near Sauk Rapids, has been brought into considerable use for building purposes. Large bodies of granite exist in the upper Minnesota Valley, at Granite Falls and Minnesota Falls; and in the Northeastern part of the State.

WHITE SAND FOR GLASS.—A sandstone of remarkable purity, composed of limpid and colorless quartz, varying from forty to one hundred feet in thickness, is found overlying the limestone formation at Fort Snelling, and along the Mississippi below the Falls of Saint Anthony, to Red Rock. Subjected to chemical analysis, this stone gave two-tenths of one per cent. of foreign matter, which is alumina, with a trace of a carbonate of lime, and is pronounced even purer than the celebrated Lind sand used by Scotch manufacturers of flint glass.

Prof. Owen's (U. S. Geologist) report, says: "The St. Peter's (Minnesota River) country certainly can afford as pure a quality of sand as that obtained in Missouri, and now, I believe, extensively used in the glass houses of Pittsburg."

TRIPOLI.—He describes a bed of tripoli near Stillwater as of "very fine quality," "inexhaustible for all practical purposes," and "a source of wealth to the State."

CLAY.—There is an abundance of clay underlying the soil in the larger portion of the State, of which brick of good quality are made. Beds of marl, adapted to the manufacture of pottery, are found in various places; and a bed of fine porcelain clay is reported in Wabashaw County.

Climate.

PECULIAR ADAPTATION OF SOIL AND CLIMATE.

Prominent among the questions proposed by the emigrant seeking a new home in a new country, are those concerning the climate, its temperature, adaptation to the culture of the grand staples of food, and its healthfulness.

Though Minnesota has no mountain peaks, its general elevation gives it the characteristics of a mountainous district; that, while it is equi-distant from the oceans that wash the eastern and western shores of the continent, and is therefore comparatively unaffected by oceanic influences, it has a great water system of lakes and rivers within its own borders. These, combining with other influences, give the State a climate in many respects dissimilar to the other Northern States.

Its yearly mean temperature (44.6°) coincides with that of Central Wisconsin, Michigan, Central New York, Southern Vermont, New Hampshire, and Maine.

It is well known that dampness is the element whence comes the greatest suffering, whether of cold or warm weather. With an average temperature of 16°, the dry atmosphere of winter in Minnesota is less cold to the sense than the warmer yet damp climate of States several degrees further south.

The farmer improves the winter season by preparing fencing and fuel, and drawing to market the surplus products of his last year's toil. Lumbermen are busy in the forests getting ready logs to be borne on the swollen streams of spring to the various lumber manufactories. Winter in Minnesota is a season of ceaseless business activity and constant social enjoyment, and by those accustomed to long wintry storms, and continued alternations of mud, and cold, and snow, pronounced far preferable to the winters in any section of the Northern States. Here there is an exhilaration in the crisp atmosphere which quickens the blood and sends the bounding steps over the ringing snow with an exultant flurry of good spirits akin to the highest enjoyment.

But the best evidence of the rare adaptation of the climate, as well as the soil of Minnesota, to agriculture, are the incontrovertable statements of its bountiful products heretofore shown in this pamphlet.

The soil of Minnesota may be classified in four geological divisions—limestone, drift, clay, and trap. Scientific analysis develops the presence in due proportion of elements of extraordinary fertility in each of these, comparing favorably with the most celebrated soils in the world. David Dale Owen, the eminent geologist, describes it as of "excellent quality, rich as well in organic matter as in those mineral salts which give rapidity to the growth of plants, and that durabilty which enables it to sustain a long succession of crops." It has been analyzed by Dr. A. H. Hayes, assayer to the State of Massachusetts, who pronounces it a "dark colored, fine textured soil abounding in organic matter, and highly fertile. It is in fact a large amount of natural manure, mixed with soil, and cannot fail to produce great and permanent fertility. It closely resembles the sugar cane soil of the West India Islands." This theoretic excellence is amply confirmed by the practical results of agriculture.

SALUBRITY OF CLIMATE.

Of paramount importance to the emigrant, is the healthfulness of the locality which is to be the scene of his future labors and the home for himself and family. What to him are fair fields, flowering meadows, buried in the luxuriant growth of fertile soils and tropical suns, if they generate fever-producing miasm and vapor? What are soft and perfumed

breezes, if they waft the seeds of pestilence and death? What are bountiful harvests of golden grain, and rich mellow fruits, and all the wealth the earth can yield, if disease must annually visit his dwelling, and death take away one by one the loved and the young?

It is well known that some of the fairest portions of the Western States are so fruitful of the causes of disease, as almost to preclude settlement. And multitudes have left their comparatively healthy New England and European homes, to find untimely graves in the rich soil of some of the Western and Southwestern States. And even in sections of these States deemed most healthy, the climate has an enervating effect upon those accustomed to the bracing air of Northern Europe and the Eastern States.

The dryness of the air, the character of the soil, which retains no stagnant pools to send forth poisonous exhalations, the universal purity of its water, the beauty of its scenery, and the almost total absence of fog or mist, the brilliancy of its sunlight, the pleasing succession of the seasons, all conspire to give Minnesota a climate of unrivaled salubrity, and to make this a home of a joyous, healthy, prosperous people, strong in physical, intellectual, and moral capabilities. And while the chilly, damp winds from the Atlantic are sowing broadcast the seeds of that terrible disease, pulmonary consumption, while the malarious exhalations from the undrained soil of Indiana, Illinois, and other States of the Southern Mississippi Valley, yield an annual harvest of fevers, Minnesota enjoys an almost entire immunity from both. If fever and ague occur, the germ was imported; if consumption claims its victim, the cause is to be sought elsewhere than in the climate of Minnesota.

TESTIMONIALS AS TO HEALTHFULNESS.

But let those testify who are either wholly uninterested, or, whose interest springs from a grateful consciousness of restored health resulting from a sojourn in Minnesota.

Surgeon G. K. Wood, U. S. Army, speaking of the advantages of a Northern over a Southern climate in cases of consumption, says:

"The present injudicious course of sending consumptives to the hot, low and moist coast, and the islands of the Gulf of Mexico, should be abandoned. In diseases of debility the remedies are tonics and stimulants. What is more debilitating than affections of the lungs? It is simply not cold, and has no other advantage over the Northern States."

Disturnell, author of a work on the "Influence of Climate in North and South America," says that "*Minnesota may be said to excel any portion of the Union in a healthy and invigorating climate.*"

The following comparative statement exhibits the proportion of deaths to population in several countries in Europe and States in the Union:

Minnesota	1 in 155	Wisconsin	1 in 108
Great Britain & Ireland	1 in 46	Iowa	1 in 93
Germany	1 in 37	Illinois	1 in 73
Norway	1 in 56	Missouri	1 in 51
Sweden	1 in 50	Michigan	1 in 88
Denmark	1 in 46	Louisiana	1 in 43
France	1 in 41	Texas	1 in 46
Switzerland	1 in 41	Pennsylvania	1 in 96
Holland	1 in 39	United States	1 in 74

April, 1878—Present Population, 750,000.

The population in the fall of 1877, as estimated from the census of 1875, was 675,000. This census gave the nativities of the people at that time, and while any calculations are arbitrary and necessarily inexact, yet, as I believe it to be a fair approximation to the facts, I reproduce it here:

Natives of Minnesota	231,750
" other States	197,150
" Ireland	25,300
" Germanic States	76,500
" Norway	60,000
" Sweden	34,500
" British Provinces	21,000
" England and Wales	9,000
" other countries and unknown	19,800
Total	675,000

Lands for the Landless. Homes for the Homeless.

GOVERNMENT LANDS. THE AMOUNT STILL VACANT.

I am indebted to Gen. James H. Baker, Surveyor-General of Minnesota, for the following valuable article on this subject. The General says:

"To post the books and see just where we stand in the disposition of our lands, we find that we came into the inheritance of a vast domain, containing 53,449,840 acres; deducting the water areas, 2,700,000 acres, we had 50,749,840 acres of land, including Indian reservations. Of these lands 39,282,418 acres have been surveyed, leaving 11,467,422 acres yet to survey. Of these surveyed lands the following disposition has been made, and this table will not be found elsewhere, and has been prepared with great care from official sources:

Disposition of Surveyed Lands.	Acres.
Cash sales and warrants	8,920,285.70
Homestead and timber culture acts	5,829,042.64
Agricultural college lands	1,033,908.75
Railroad grants (certified)	7,621,131.22
Swamp selections (approved)	1,361,125.13
Internal improvement	500,000.00
Schools	2,969,990.00
Universities	92,548.35
Indian scrip	244,672.29
Float scrip	400.00
Salines	26,435.00
Public buildings	6,400.00
Grand Total	28,605,939.08

NOTE.—These returns are up to June 30, 1877, except railroad lands, which are up to Dec. 31, 1877.

Of the thirty-nine millions of acres of surveyed lands, it will thus be observed that 28,605,939 have been disposed of, leaving 10,676,479 acres of the surveyed portion of the State yet undisposed of, and of both the surveyed and unsurveyed areas of the State, leaving a balance of 22,143,901 acres yet subject to disposition. The surveyed lands embrace the cream of our agricultural areas. Those which are in the hands of actual settlers go to create the State and fulfil their highest mission. Those which have gone as gra-

tuities have been given with a lavish hand. But the bank account in that direction is about closed; and but few more checks can be drawn. The area yet to survey will bring to the market a few agricultural lands in the counties of Polk and Pembina, some valuable pine on the tributaries of St. Louis and on waters flowing north to the Rainy Lake series, and, it is fully believed, rich minerals on the north shore of Lake Superior. In that superb lacustrine region will also be found the Switzerland of America, amid whose romantic lakes the tourist of the future will find diversion and health."

The 2,700,000 acres of water area are comprised in the 7,000 meandered public lakes alone; there are also a vast number of lakes under 40 acres each, which are sold with the sections of land and are private property. The Government land is divided up in the nine different land districts about as follows, viz.: Taylor's Falls land district, 350,000 acres; Benson, 325,000; Fergus Falls, 480,000; Worthington, 60,000; New Ulm, amount not stated, nearly all taken; Red Wood Falls, do., do. In the Crookston, St. Cloud and Duluth districts, comprising the northern half of the State, there are 20,928,901 acres, about one-half of which are still unsurveyed. Total, 22,143,901 acres. Minnesota school lands still unsold, 2,500,000 acres.

RAILROAD LANDS.

Northern Pacific, 1,615,000 acres; Winona & St. Peter, 1,160,000; Saint Paul & Duluth, 1,200,000; Saint Paul & Pacific, 1,120,000; Saint Paul & Sioux City, 850,000; Hastings & Dakota, 325,000; Chicago, Milwaukee & Saint Paul, 460,000; Southern Minnesota, 200,000. Total, 6,932,000 acres. Rapidly as the lands of all kinds have been taken up during the past winter and present spring, it will be seen that there are still left some *Thirty-one million five hundred and seventy-six thousand acres* subject to entry under the homestead, pre-emption and tree culture acts; with State school lands and railroad lands for sale by the above eight railroads. Much of all this land is equal in quality to any in the State, and situated convenient to many railroads already in operation.

Public Lands.

DIRECTIONS HOW TO OBTAIN THEM, FROM AN OFFICIAL SOURCE.

Citizens of the United States, or persons who have declared their intention to become such, who are heads of families or over the age of 21 years, can obtain public land of the United States under the homestead, pre-emption, or timber culture acts, in the following manner, viz.:

First.—A citizen, or one who has declared his intention to become such, can homestead 160 acres outside, or 80 acres inside, the ten mile limits of any railroad grant, by filing his application and affidavit, and within six months thereafter commencing settlement and improvement, and continuing the same five years.

Second.—A soldier having served in the army or navy during the war of the rebellion for over ninety days can obtain 160 acres of any of the public lands by filing, himself or by an attorney, a declaratory statement, and within six months thereafter filing his affidavit and application commencing settlement and cultivation, and continuing the same for five years, *less the time he served in the army or navy.* His widow can take advantage of the

above. In case of his death in the army, the term of his enlistment is deducted.

Third.—A citizen or person who has declared his intention to become such, is entitled to 160 acres under the pre-emption law, by commencing settlement thereon, and within ninety days thereafter filing a declaratory statement continuing such settlement and improvement. And any time after six months or within thirty-three months from date of settlement, making proof and payment for the same at the rate of $1.25 outside, and $2.50 per acre inside, the ten mile limits of any railroad grant.

A person qualified as before can file his application and affidavit for 160 acres, (under the timber culture act,) of any of the public lands that are naturally devoid of timber, (provided that only one-fourth of any section can be taken under this act,) and by breaking, planting, and keeping in growing condition forty acres of timber, the trees not to be more than twelve feet apart each way, for a period of eight years, will be entitled to patent for the 160 acres. A bill has passed the United States Senate, and will become a law, reducing the number of acres to ten, and requiring that the trees shall be planted 4 feet apart instead of 12 feet.

The government fees for entries under the several acts mentioned, are as follows, viz.:

HOMESTEAD.

160 acres inside 10-mile limits	$18 00
160 acres outside 10-mile limits	14 00
80 acres inside 10-mile limits	14 00
Soldier's declaratory statement	2 00

PRE-EMPTION.

Declaratory statement	2 00

TIMBER CULTURE.

For all entries, irrespective of area, inside or outside ten-mile limits,	14 00

Over 28,000,000 acres are now disposed of, leaving over 22,000,000 acres, nearly half of the land area of the entire State—for the landless and poor of all nations of the earth to enter in and possess. Here is a domain abounding in all the elements of health, beauty, and fertility—an area larger than many of the principalities of Europe, which awaits the developing hand of the frugal and industrious among all classes and conditions of men.

FREE FARMS IN MINNESOTA.

Under the provisions of the homestead law the land thus acquired without cost is exempt by law from liability for all debts previously contracted.

This privilege of obtaining free farms under the homestead law is shared by women, whether widows or unmarried ladies, equally with men.

Minnesota invites the honest and industrious, however poor and friendless, to make themselves free homes; also those who have wealth; the well to do class, and those of moderate means. The manner in which this may be done is pointed out as follows:

LAND OFFICES.

For the convenience of all who may wish public lands, nine government land districts have been established in the State, in each of which is a land office. In each of these are two officers, called Register and Receiver, who conduct the business. The location of these offices, and the name of the Register is as follows:

WORTHINGTON DISTRICT.

1st. For a district 30 miles wide, and extending from east to west through the State, along the south line, office at Worthington in Nobles County. Register, Mons Grinager.

There is still left a small amount of good government land in parts of Pipestone and Murray Counties.

NEW ULM DISTRICT.

2d. For a district 30 miles wide, extending east and west immediately north of the last named, office at New Ulm, in Brown county. Register, C. B. Tyler. A small amount of good government land yet in parts of Pipestone, Murray, and Lyon counties.

REDWOOD FALLS DISTRICT.

3d. For a district 30 miles wide, extending east and west immediately north of the last named, and embracing all of townships 111, 112, 113, 114, and 115, office at Redwood Falls, Redwood county. W. P. Dunnington, Register. A small amount of good government land in the counties of Renville and Yellow Medicine and a part of Lyon.

BENSON DISTRICT.

4th. For a district 30 miles wide, north of the above, extending east to the Mississippi river; also including to northwest all of townships 124, 123, 122 and 121 west of range 35, (embracing the county of Big Stone, the southern half of Stevens and Pope and part of Swift and Kandiyohi,) formerly belonging to the St. Cloud district, are now within the limits of the Benson Land District, office at Benson, in Swift county. A small amount of good government land in the counties of Lac qui Parle, Chippewa and Big Stone. Register, J. Q. A. Braden, clerk in Register's office. 325,000 acres of unclaimed lands still undisposed of.

FERGUS FALLS DISTRICT.

5th. For a district north of the last, embracing all townships numbered from 125 to 136 inclusive, from range 35 to the western border, being the counties of Wilkin, Otter Tail, Grant, Traverse and the northern half of Stevens. Good government land yet in all these counties. Office at Fergus Falls, Otter Tail county. Register, Soren Listoe. 480,000 acres still subject to entry and pre-emption.

DETROIT DISTRICT.

6th. For a district immediately north of the above, of the same width, and extending to the northern border of the State. This is a new district

opened in 1872, and most of its government lands are yet subject to entry under the homestead and pre-emption laws. The counties of Becker and Clay, traversed by the Northern Pacific Railroad, are in this district, and thousands of miles of fertile prairie and openings belong to it. Office at Detroit, in Becker county. Register, Thos. C. Shapleigh.

TAYLOR'S FALLS LAND DISTRICT.

7th. For a district lying between the St. Cloud district and the St. Croix river, office at Taylor's Falls, in Chisago county. Register, J. P. Owens. Number of acres still subject to entry, 350,000.

DULUTH LAND DISTRICT.

8th. For the remainder of the State, comprising the territory bounded by Lake Superior, British America and the St. Cloud and Taylor's Falls districts, office at Duluth. Receiver, T. H. Pressnell.

ST. CLOUD DISTRICT.

9th. For a district 24 miles wide, north of the Benson district, extending eastward from Range 35 to the Taylor's Falls district; and also extending northward to the north boundary of the State, office at St. Cloud. Register, J. V. Brower. Good Government land in Wadena county One-half of the St. Cloud district still belongs to the United States—a considerable portion of which is unsurveyed.

STATE LANDS.

The sixteenth and thirty-sixth sections in each township have been granted by Congress to the State, for the support of common schools. The total amount thus acquired will eventually reach 3,000,000 acres. Minnesota has also received about 83,548 acres in aid of the State University and 94,439.28 acres of Agricultural College lands. An excellent system for the gradual sale of these lands has been devised. They are placed under the control of the State Auditor, as Land Commissioner, and provision is made for their appraisal at a price not below $5 per acre, and each year a quantity of these lands is offered at public sale in the several counties. The purchaser is required to pay in cash 15 per cent. of the amount of his bid for prairie land, and 20 to 75 per cent. for timber land, according to the value of such timber. On the remainder of the purchase money the purchaser is granted a credit of twenty years at 7 per cent. interest, payable yearly in advance; or he may at any time within that period pay the whole amount, receive a deed at once, and thus stop the accruing of interest.

These advantageous terms attract crowds of purchasers at the annual sales. The small sum required in cash enables the purchaser to employ his means for the improvement of the land, and frequently the profits of a single crop cover its original cost, while the land generally increases in value many fold long before final payment is required.

The public sale of 80,000 acres of State, School, University and Internal Improvement lands at Redwood Falls, on the 13th of May, 1878, offers a splendid chance to those who want to make homes in a settled community, where all the great markets are accessible by railroad.

CLASSES OF PUBLIC LANDS.

There are three classes of public lands—

1st. All lands outside the limits of the lines of the several land-grant railroads in this State. These are held at $1.25 per acre.

2d. All public lands comprising the even numbered sections within the limits of railroad grants, which are $2.50 per acre.

3d. The lands formerly reserved for the Sioux Indians, which, until offered for sale, are subject to pre-emption by actual settlers at their appraised value.

The two first may be had at all the land offices, and the third at the New Ulm, Benson and Redwood Falls offices only.

THE HOMESTEAD ACT.

In May, 1862, Congress passed the Homestead Act. The main features of the bill are, that all lands owned by government are open to settlement, in parcels not exceeding 160 acres to each person.

The bill requires a permanent residence of five years upon the land. The applicant should be the head of a family; or over 21 years of age, or have performed service in the United States army, in which case he may be a minor.

He must not have borne arms against the United States, or have given aid and comfort to it enemies.

He must be a citizen of the United States, or have declared his intention to become such.

Each quarter section of the millions of acres of her unoccupied lands needs an actual settler, to give beneficent action to the idle richness slumbering in her black soil, and convert prairie and meadow into fields of ripening grain, for the supply of the granaries of the world. How princely that act of Congress which secures to the poor man a farm, upon the simple condition of laboring five years in his own service. Mighty conquerors have often divided the conquered territory amongst their favorite chieftains, but America acquires territory by purchase, and distributes it among the landless of all nations.

PROPERTY.

The following is a statement of the assessed valuation of the real and personal property of Minnesota for the years named:

	Real Estate.	Personal Property.	Total.
1862 -	$24,791,888.31	$ 5,040,831.40	$29,832,716.71
1871 -	69,267,563.00	21,174,299.00	90,441,862.00

—showing the total value of property to have more than trebled in the nine years from 1862 to 1871.

The total valuation of the taxable property of the State for 1877, was $221,000,000. The State tax is two mills, or one-fifth of one per cent.

In the six years from 1871 to 1877 the value of property in the State has again trebled, notwithstanding the fact that four years out of the six are included as the disastrous years resulting from the panic of 1873.

But the above by no means shows the actual value of property, in consequence of the custom of assessing it at only a fraction of its real worth.

The following statement shows more nearly the real value, being an estimate founded upon known facts and actual sales for the year 1871:

Value of land and improvements outside the limits of cities and towns	$122,567,360
Lots in cities and towns, and improvements	45,000,000
Total value of real estate	$167,567,360
Total value of personal property	96,155,157
Giving a grand total of	$263,722,517

A similar statement for the year 1877 would give the value of all the real and personal property at *Six Hundred and Sixty-three Million Dollars.*

THE ASSESSORS' VALUATION.

Taxable value of real property in Minnesota in 1877	$175,783,979
Taxable value of personal property in Minnesota in 1877, (exemptions being deducted)	45,141,659
Total	$220,925,638

SCHOOL FUND AND SCHOOL LANDS.

Amount of School fund permanently invested and bearing interest	$3,403,219 23
Estimated number of acres of school land remaining unsold	2,500,000
Average price per acre obtained for school lands sold	$6 07.4
Amount of school money apportioned during 1877	$199,982 07

HOMESTEAD EXEMPTION.

A very liberal law exists in Minnesota for the protection of the homes of her people against the effect of sudden reverses by which innocent families are liable to be thrown houseless upon the world's cold charities. The following is the language of the law of this State exempting homesteads from liability for debt:

"That a homestead consisting of any quantity of land, not exceeding eighty acres, and the dwelling-house thereon and its appurtenances, to be selected by the owner thereof, and not included in any incorporated town, city, or village, or instead thereof, at the option of the owner, a quantity of land not exceeding in amount one lot, being within an incorporated town, city or village, and the dwelling-house thereon and its appurtenances, owned and occupied by any resident of this State, shall not be subject to attachment, levy or sale, upon any execution or any other process issuing out of any court within this State. This section shall be deemed and construed to exempt such homestead in the manner aforesaid during the time it shall be occupied by the widow or minor child or children of any deceased person who was, when living, entitled to the benefits of this act."

Thus, without regard to cost—whether it be a cottage or a palace—the sanctities of home are guarded by the protecting arm of the law.

It is not improbable that advantage is sometimes taken of the liberal provisions of this law to cover the knaveries of dishonest men. This is a liability from which few humane laws are exempt; but there can hardly be serious danger in enactments which merely err on the side of mercy.

There is also a liberal exemption on personal property, consisting of the family Bible, pictures, school books, musical instruments, church pew, cemetery lot, all wearing apparel, beds, stoves, and furniture not exceeding

$500 in value; also a certain number of cows, sheep, and working team, with a year's food for the same; a wagon, sleigh, and farming implements not exceeding $100 in value; also a year's supply of family provisions, or growing crops, and fuel, and seed grain not exceeding 50 bushels each of wheat and oats, 5 of potatoes and 1 of corn, also mechanics' or miners' tools, with $400 worth of stock-in-trade, and the library and implements of professional men.

RATE OF INTEREST.

When not specified, the rate of interest in this State is understood to be seven per cent.; but any rate is legal which may be agreed upon and expressed in writing, not exceeding twelve per cent. per annum.

LEGAL PRACTICE.

Pleading in this State is according to what is known as "the code," substantially as practiced in New York.

Educational Facilities.

STATE UNIVERSITY, NORMAL AND COMMON SCHOOLS.

No State enjoys more munificent provision for the education of her people than Minnesota. Very early steps were taken in behalf of several important measures for its promotion.

UNIVERSITY OF MINNESOTA.

This Institution, which is surpassed by but few in the country, is located at Minneapolis. It is provided with excellent and carefully selected instructors, and occupies a series of elegant and commodious buildings. It is associated with the Agricultural College of the State, and both Institutions are generously endowed by a Congressional appropriation of public lands.

Both sexes are admitted to its privileges, and the enrollment at present is: gentlemen, 211; ladies, 93; total, 304.

This University was the first in this country to admit ladies on equal terms. Its example has been followed by those of several other States. Its property is worth one million, and its permanent fund is $368,000. Hopeful as is this view of its condition, it is in the practical achievements of the Institution in the noble work for which it was established that we may most indulge an honest pride.

The devoted efficiency of an able faculty, the assiduity of a superior class of students, and the generally harmonious working and inviting outlook of the Institution are all matters for public congratulation.

NORMAL SCHOOLS.

Three normal schools are in operation, viz.; The first at Winona, second at Mankato, and third at St. Cloud.

Cost of buildings	$222,000
Enrollment of pupils	996
Total number of graduates	548

Boys and girls are admitted on equal terms in all our Normal and Common Schools and Colleges. Women are allowed to vote on all school matters throughout the State.

There are also various academies, graded schools and high schools in different parts of the State, in which are taught the higher branches of learning.

Excepting those older States, containing the first class, richly endowed colleges, no section of the Union affords better facilities than Minnesota for acquiring a thorough education, all free of expense.

The Cost of Making a Homestead.

A settler who resides in Lincoln County, in the extreme southwestern part of the State, sends to the "Workman," at St. Paul, the cost of his homestead, as follows: He took a soldier's claim, which cost $15.00, government fee; railroad round trip ticket, $12.50; two yoke oxen, $200.00; wagon, $55.00; breaking plow, $23.00; ordinary plough, $17.00; harrow, $10.00; house, 14x16 feet, materials, $27.00, built it himself. He broke 15 acres of land last fall, $45.00, which he now has sown in wheat. He has broken 5 acres this spring to plant in corn and potatoes. He has laid in a stock of provisions for six months at $48.00, for a family of four —himself, wife and two children. Wood $1.75 a cord. He had his own furniture, the freight was $25.00. Total, $482.55.

Another in the Valley of the Red River of the North sends the following:

Government fee $9.00; colonization ticket, $8.30, a person from St. Paul to Moorhead; one car load of furniture and goods, $50, at colonization rates. To build a house 16x18, $50; common lumber, $18 to $20; breaking plow, $25; harrow, $10; one yoke of oxen, $100 at St. Paul, one pair of swine, $3.00; one-half dozen chickens, $3.00; common furniture, $30.00; one cow, $35; provisions for a family of four, to last six months, $50. Total $478.20.

Here are some prices throughout the State—lumber, $15 per thousand. Good fence posts $8 per hundred. Oxen $75 to $100 per yoke. Cows $20 to $35. Farm horses $75 to $125 each. First breaking costs from $2.50 to $3.00 for clean prairie; $5 to $8 for brush land.

The first crop will in many cases pay for the breaking, seeding, and the entire cost of the land; and will in all cases pay cost of breaking twice over.

These prices will afford sufficient clue to allow of close estimates for different scales of operations. On wheat, there is usually a profit of from $4 to $15 per acre; but wisdom teaches a diversification of husbandry which places the farmer beyond the vicissitudes of a single crop.

Thus it will be seen that, with the outfit of a few hundred dollars, one can make a start on the new lands of Minnesota; and, if wanting even this small capital, he need not be discouraged if he have health and strength; these, with habits of industry and economy, will surely overcome all obstacles. The history of pioneer life abounds in instances of penniless settlers who in a few years acquired a *comfortable independence.*

At the present time one can earn money enough to pay the initiative sum and make the improvements which would constitute occupancy of the land; and by alternately working for himself on the homestead, and for others during the harvesting, or in the pineries in the winter season, he may build his house and purchase stock and tools, and by the time the five years have elapsed, find himself the owner of a good home, surrounded by the comforts of life, with a sure title to a farm growing more profitable as improvements are added to it, and more valuable as farms and improvements multiply around it.

True, in the outset, it will cost self-denial of present gratification, much hard labor and close-calculating economy; but without these what great result was ever obtained? The satisfaction of having the noble purpose of acquiring a competency and comfortable independence of the ills of poverty would to a noble soul be compensation adequate to long years of servitude. And yet it is believed that the most indigent settlers, in the first years of pioneer life, scarcely endure more of privation, toil and hardship than falls to the lot of the majority of laborers and common mechanics of the Eastern States, who toil on year after year for a mere subsistence, with no prospect of anything better in the future.

A laboring man in the cities and larger towns pays from $50 to $100 yearly rent for a tenement as devoid of pure air and sunlight as it is in convenience, a sum which, if saved for one year, would make him the owner of a healthy house on the prairies of Minnesota; whilst the remainder of his hard earned money, increased by the earnings of his wife, and under her prudent management, scarce suffices to procure food, clothing and fuel for the dependent little ones in good times; when business is checked, or sickness comes, suffering is the inevitable consequence.

To such Minnesota offers home, comfort, and ultimate wealth, upon the sole condition of a few years of patient toil and well directed effort. Nor to these only are such offers made; they extend to the millions of the old world, groaning in misery, driven to despair by bad government, burdensome taxation, surplus of labor, and deficiency of the means of subsistence—to all such is made the same generous offer.

WHEN TO COMMENCE.

The most favorable time for opening a farm must be determined by circumstances. Many come in the months of September and October. This is the better time for those who have the means for a comfortable subsistence. It gives them leisure to select a good location and build a house before snow covers the ground, and the advantage of the winter months to get out fencing and to prepare to commence farm work as soon as spring opens.

To the man of means any portion of the year is a favorable time for coming to Minnesota. But to the mechanic or laborer, and especially the poor man who expects his support from the soil, the value of time is an important consideration. As a rule, the fall is the worst time for the first two named to come, while early spring is probably the best for all. If the immigrant reaches his land by the middle of June, he is too late to produce most crops the same season, but he is yet barely in time for corn, potatoes, and turnips. For the corn, let him turn over the virgin sod,

chop holes therein with an axe and drop in the seed, which, if the season be favorable, especially a wet one, will produce a tolerable crop. The potatoes may be dropped into the furrow and covered by the plough with the tough sod, through which the plant will grow, while turnip seed may be sown on the freshly turned sod and very slightly covered. June is the best month for breaking wild land, especially prairie, while the breaking season should not begin earlier than the middle of May nor be prolonged beyond the first of August. A particular stage of vegetation of the overturned sod is necessary for its rapid decay, and frequently more harm than good results to land which is first unseasonably plowed.

The present is a more favorable time for immigration to Minnesota than any past period of her history. Some of the richest sections of the country are more easily reached which a few years ago were very difficult of access for want of roads. Other portions have long been vacated by Indians, and those rude natives who were always an annoyance to the early settlers, have long since been far removed and almost entirely forgotten.

Especially is this a favorable opportunity for the emigrant from foreign countries. Grim visaged war at home. Peace, prosperity, happiness, here.

Under the former law of Congress, the payment of $200 for 160 acres of land was required of the settler whenever it was offered for sale. Many found themselves unable to raise this sum except by hiring money at a high rate of interest on mortgage of the land, when the financial crisis of 1857, occurring soon after, left them no alternative, and the land with its improvements went to satisfy the creditor. The Homestead Act precludes the possibility of a recurrence of similar embarrassments in the future.

Still, the emigrant of to-day will find his share of difficulties to encounter. Hard work, and careful management for the first few years, are indispensable. An occasional drought may pinch his crop, frost will probably sometimes, but very rarely, nip his corn and potatoes. Pigeons and blackbirds may gather some of his grain, and gophers help themselves to his root crops. Yet with all, he may rely on an abundant supply of food, and other necessaries of life—a good home, and a reasonable prospect of ultimate wealth.

WHAT MONEY CAN DO.

Of course capital, directed by sagacity and enterprise, possesses great advantages in Minnesota as elsewhere; indeed the new avenues being continually opened by the rapid development of a bountiful new country, multiply the opportunities for its profitable employment. There is scarcely a reputable vocation of any kind wherein the same capital and good management which insures success in Eastern communities, will not yield far greater returns here. Judicious investments in real estate, owing to the rapid settlement and development of the country, are sure to realize large profits.

WHAT PLUCK AND MUSCLE MAY DO.

Great as are the unquestionable advantages which a union of money and industry possesses, there is no country where unaided muscle, with a plucky purpose, reaps greater rewards than under the bright skies and helpful atmosphere of this fair land. Feeling himself every inch a man

as he gazes upon the unclaimed acres which shall reward his toil, the settler breathes a freer air, his bosom swells with a prouder purpose, and his strong arms achieve unwonted results.

Minnesota is emphatically the place for men whose capital consists of brawney arms and brave hearts. Any man possessing these may do as thousands who have little else, annually do in this State—select a homestead, in some one of the many beautiful and fertile regions into which railroads are rapidly penetrating, and, by the time he produces a surplus, the railroad is at his door to take it to market—he finds himself not a lone settler, encountering the hardships of frontier life, but in daily communication with the busy world, and the proud possessor of a valuable farm which has cost him little but the sweat of his brow.

WHO SHOULD COME TO MINNESOTA.

Young people of either sex, however poor in cash, if rich in courage, hope and strength, may be encouraged to come to Minnesota at all times. It may not be advisable for those advanced in years, or those who are comfortably settled in old and well-established communities, to incur the hazards incident to a removal to a new country. And it should be further understood that the wholly destitute will encounter at first greater hardships here than those they seek to escape. Northern countries are usually more prosperous than those of languid climates, largely because of the greater stimulus the energies receive in guarding against hunger and want, for which reason it is, of course, more difficult for the feeble and destitute to find maintenance; but to the thousands in the older States and in foreign countries, whose only resource is the labor of their hands, who, on looking around, see every avenue to manly independence thronged by jostling multitudes, and the only alternative left them emigration or dependent labor; to all such we offer the testimony of an English writer: — "Minnesota affords the finest and most inviting field for emigration in the world."

Formerly the richest countries were those in which the products of nature were the most abundant, but now the richest countries are those in which man is the most active. In Minnesota we may justly claim that both essentials are found in full measure. Our bountiful soil ensures the first, and our bracing atmosphere the second. Moreover, thanks to the beneficent wisdom of that generous legislation which finds no parallel in the history of human enactments, every man is here given a farm upon the simple condition, as before stated, of laboring five years *in his own service.*

The world's plaudits have too long been for men and nations whose power was evinced in devastation. The law of might partitioned the spoil among the conquerors, but I again repeat that it is the glory of America that she acquires territory by purchase, and distributes it among the landless of all nations. In Minnesota is found the fairest domain upon which the blessings of this new dispensation receive practical exemplification. A cordial welcome is extended to all to come and partake of the national bounty, and when, with all the advantages with which lavish nature has endowed our State, it is considered that here also may be possessed the perfect health requisite for their highest enjoyment, it is not too much to claim that Minnesota presents unequalled inducements to those in search of new homes.

To the immigrant from monarchic governments, the benefits of a republic offer many inducements. Its protection is extended alike to all classes of citizens, its rights, immunities and privileges enjoyed by all. There are in the Eastern States a class of small capitalists, chiefly widows and unmarried ladies, living upon the income of a small legacy, or of the earnings of former years, who manage to subsist comfortably when prices are low, but who, in the present times, must find it difficult to make their means meet their expenses. Such will find the actual cost of living in Minnesota about one-third less than in the Eastern States, whilst the more simple habits of a new country and less expensive modes of dress and equipage, will enable them to maintain a corresponding social position at a still further reduction.

RAILROADS & RAILROAD LANDS.

Chicago & North-Western Railway Co.

LAND DEPARTMENT.

Chicago, November 10th, 1878.

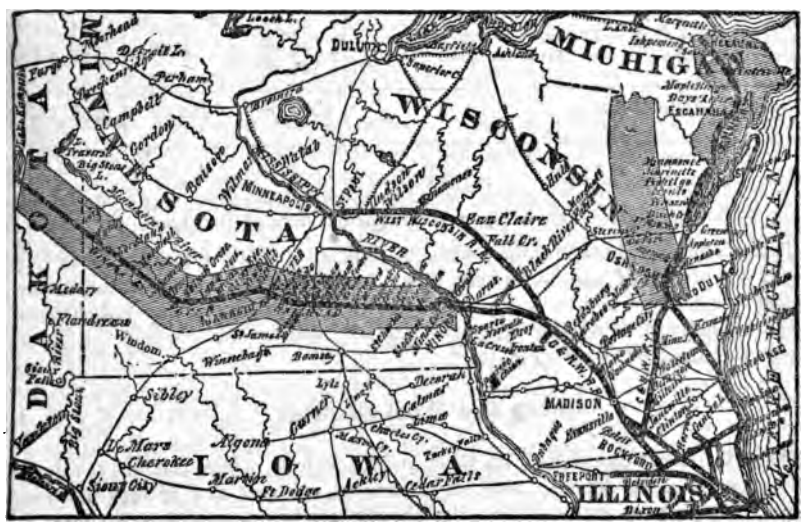
HON. JOHN W. BOND,
Secretary of Board of Immigration,
St. Paul, Minn.

DEAR SIR:

In compliance with your favor of the 6th inst., I have the pleasure of submitting the inclosed statement in reference to the lands along the line of the Winona & St. Peter Railroad, and map showing railroad communication with the same.

Very truly yours.

CHAS. E. SIMMONS,
Land Commissioner.



As will be seen by the above map, the Chicago & North-western Railway Company, with the Winona & St. Peter Railroad, which it operates and controls, has a continuous line of railroad extending from Chicago, Illinois, through the State of Minnesota, into the Territory of Dakota.

The Winona & St. Peter Railroad Company now has ready for sale, along the line of its railroad, about 1,160,000 acres of choice farming lands in Southern Minnesota and Eastern Dakota. The location of these lands is indicated on the above map by the shaded belt on each side of said Winona & St. Peter Railroad, from Winona, on the Mississippi, to Lake Kampeska, in Dakota Territory.

The price of these lands is from $2.00 to $8.00 per acre on long time.

First class farming lands situated within from one to six miles of the railroad depots, and town sites, established and laid out by said company on said lands on the line of said railroad, west of Marshall, Minnesota, are now offered for sale at the extremely low prices of from $4.00 to $6.00 per acre, payable as follows:

The first year one-fifth cash, with interest in advance, at six per cent., on the balance of the purchase price. The second year interest only, in advance, on the balance of the purchase price. The balance of the purchase price in two, three, four and five years, with interest in advance each year on unpaid balances—excepting the last year, which is one-fifth of the purchase price only.

The purchasers' account would stand as follows, supposing he contracted for 40 acres of land on the above terms, at $5.00 per acre:

PAYMENT.	Purchase Price.	Interest.	Total.
1st Payment made at date of sale,.....	$40.00	$9.60	$49.60
2d " 1 year after date of sale.....	.....	9.60	9.60
3d " 2 years " " "	40.00	7.20	47.20
4th " 3 " " " "	40.00	4.80	44.80
5th " 4 " " " "	40.00	2.40	42.40
6th " 5 " " " "	40.00	.....	40.00
Total payment made,	$200.00	$33.60	$233.60

12½ per cent. will be deducted from the purchase price for all cash, and the same land may be purchased for $175 cash down at date of purchase.

These lands are high rolling prairie, of dark rich sandy loam, and lie in the **Great Wheat Belt of the Northwest,** in a climate unsurpassed for healthfulness, and in a country which is being rapidly settled by a thriving and industrious people, composed, to a large extent, of farmers from the Eastern and the older portions of the Northwestern States.

Sheep and Wool Growing.

Sheep thrive extremely well on these rolling prairies, which produce the most nutritious grass, and are well watered by unfailing streams, and springs of pure water. The foot-rot, scab and other diseases common to a flat and muddy country, are unknown in this section.

Cattle Raising.

This branch of industry has become very extensive and profitable, in the section of country where these lands are located. Cheap pasturage in abundance is found, in the summer, and an unlimited quantity of blue joint hay, equal or superior to the best quality of timothy hay, can be had for the cost of cutting, curing, etc.

Butter and Cheese Making.

The excellent pasturage, and pure water, of this section of the country, renders it particularly favorable for this branch of industry.

Market Facilities.

This company has laid out towns at convenient distances along the line of this road, within the limits of these lands, at which it has built depots, for the transaction of all business offered, and responsible parties have constructed suitable grain warehouses for the receipt, storing and shipment of grain.

It is the policy of the Company to enable purchasers to make their examinations with the least possible trouble or expense.

At Marshall, Minnesota, and at other prominent Stations within the limits of these lands, there will be found Agents of the Company familiar with the section lines, provided with suitable conveyances to take purchasers to any lands they may wish to examine.

All desirable information concerning the character, location, and price of any of these lands, can be obtained from the Land Commissioner at the Land Department of the Chicago and North-Western Railway Company, at Chicago, Ill., or of the Local Land Agent at Marshall, Minnesota. Purchasers should first call at one or the other of these offices. They will thus avoid all confusion, loss of time or expense, which is liable to result from a lack of exact information at the outset.

Settlers' Teams and Movables.

By the car load, from Chicago, and all the principal points on the lines operated by the Chicago & Northwestern Railway Company, will be transported to places within the limits of these lands at the very lowest emigrant rates, as is indicated by the following circular, issued by the General Manager and the General Freight Agent of the Chicago & Northwestern Railway Company:

IMPORTANT INFORMATION TO SETTLERS

ON THE LINE OF THE

WINONA & ST. PETER RAILROAD,

IN MINNESOTA AND DAKOTA.

Chicago & North-Western Railway & Winona & St. Peter R. R. Co.

SPECIAL FREIGHT TARIFF

ON

EMIGRANTS' MOVABLES, including Household Goods,

FARM IMPLEMENTS and LIVE STOCK,

also TREES and SHRUBBERY,

IN CAR LOADS.

TAKING EFFECT FEBRUARY 20th, 1878.

From CHICAGO, MILWAUKEE, RACINE, KENOSHA, JANESVILLE, WATERTOWN, BELVIDERE, ROCKFORD, FREEPORT, and all points on Milwaukee, Kenosha and Rockford Divisions, Freeport Line and Fox River Branch of Galena Division, and all points on Wisconsin Division south of Juneau, to Points on Winona & St. Peter Railroad between New Ulm and Gary (Dakota State Line), inclusive, - - - - - - $60.00 per car.

From Points on North-Western Union, Points on Wisconsin Division North of Minnesota Junction to Ft. Howard, inclusive, and Points on Galena (Dixon Air Line) Division, west of Geneva to Fulton, inclusive, to Points on Winona & St. Peter Railroad between New Ulm and Gary (Dakota State Line), inclusive, $70.00 per car.

From BELOIT and Points on Madison Division north of Caledonia to Madison, inclusive, to Points on Winona & St. Peter Railroad between New Ulm and Gary (Dakota State Line), inclusive, - - - - - - - - - - $50.00 per car.

From Points on Madison Division, Waunakee to Marshland, inclusive, to Points on Winona & St. Peter Railroad, between New Ulm and Gary (Dakota State Line), inclusive, - $40.00 per car.

From Winona and Points West on the Line of the Winona & St. Peter Railroad, when existing Tariff does not quote less rate, - - - - - - - - - - - $30.00 per car.

In all cases, one man will be passed free with any car containing Live Stock, to ride on the train with the car to take care of the Stock, and in such cases the agents will use the usual form of Live Stock contract.

A liberal reduction from Tariff Rates will also be made on shipments of Less than Car Load Lots of Household Goods and Emigrants' Movables, on application to General Freight Agent, at Chicago.

A discount of 25 per cent. in cash will be made from the above rates, to actual settlers in any County on the line of the Winona & St. Peter Railroad, in Minnesota or Dakota Territory, where that Company has lands for sale. To secure this discount, the freight charges must be paid at the rates given above, and the freight bill sent to the General Freight Agent of the Chicago & Northwestern Railway, at Chicago, with proper proof of settlement, within ninety (90) days from date of shipment. In case of actual Settlers purchasing the lands of the Winona & St. Peter Railroad Company, the only proof required will be the certificate of the Company's Station Agent at the Station where the freight is delivered, on the back of each paid freight bill, that the applicant for a reduction is an actual settler on railroad lands, with a description of such lands (and to enable such Agent to make the certificate correctly, such settler should exhibit to the Agent his Contract or Deed received for said lands) and that the property described by the freight bill was for his or their sole use. With settlers on other than Railroad lands, within the limits above named, an Affidavit, made

before a Notary Public or Justice of the Peace, by the owner of Emigrants' Movables, including Live Stock, or Trees and Shrubbery, certifying that the property is for his own use and benefit solely, and that he is an actual Settler in the County, or has purchased, or rented land with the *bona fide* intention of becoming an actual Settler, with the names of two good citizens as witnesses, will be required as proof to entitle the owner of the property to the discount.

The discount will also be paid to any Club of Farmers living in any County in which the Winona & St. Peter Railroad Company have lands for sale, who may wish to bring Live Stock, Trees or Shrubbery into the Country for their own use. In such cases an Affidavit, signed by all the parties interested in the shipment, and certifying that the articles are for their own personal use and benefit, will be required.

These discounts are open to all Settlers, whether purchasers of Railroad land or not, within the limits named above.

MARVIN HUGHITT, *Gen'l Manager, CHICAGO.*

HENRY C. WICKER, *Gen'l Freight Agent, CHICAGO.*

C. H. KNAPP, *General Agent, WINONA, MINNESOTA.*

THESE FINE FARMING LANDS

Are readily accessible from all points on the Chicago & Northwestern Railway and its connections. Through trains to all stations within these lands make close connection with trains on all the principal railroads running into Chicago. The Passenger fare to Chicago from any railroad station in the United States, or Canada, can be ascertained at almost any local ticket office.

To persons desirous of procuring homes in Minnesota or Dakota, the Chicago and North-Western Railway Company will sell "Land Exploring Tickets" from the following points, entitling the purchaser to one first-class fare to Marshall, Minnesota, and return:

FROM			FROM		
Chicago	Ills.	$21 85	Turner Junction	Ills.	$21 25
Crystal Lake	"	21 15	Via Crystal Lake.		
Harvard Junction	"	21 00	Elgin, (via Crystal Lake)	"	21 20
Beloit	Wis.	20 90	Belvidere, (via Caledonia)	"	21 00
Evansville	"	20 80	Rockford, (via Caledonia)	"	21 00
Madison	"	20 35	Freeport (via Rockford & Caledonia)	"	21 25
Baraboo	"	18 00	Waukegan, (via Chicago)	"	23 25
Elroy	"	16 65	Kenosha, (via Harvard Junction).	Wis.	21 10
Sparta	"	15 00	Racine, (via Chicago)	"	24 30
La Crosse	"	14 15	Milwaukee, (via Chicago)	"	25 00
Winona	Minn.	12 40	Clinton Junction	"	21 50
St. Charles	"	12 30	Via Harvard Junction.		
Rochester	"	11 90	Janesville, (via Harvard Junction)	"	22 00
Owatonna	"	9 50	Milton Junction	"	22 25
Waseca	"	8 60	Via Harvard Junction.		
Mankato	"	6 80			

FROM			FROM		
Ft. Atkinson	Wis.	$22 75	Appleton, (via Fort Howard)	Wis.	$21 75
Via Harvard Junction.			De Pere, (via Fort Howard)	"	20 35
Jefferson (via Harvard Junction)	"	22 80	Green Bay	"	20 00
Watertown	"	22 90	Via G. B. & M. R. R.		
Via Harvard Junction.			Oconto, (via Fort Howard)	"	21 40
Fond du Lac	"	23 00	Marinette, (via Fort Howard)	"	22 50
Via Harvard Junction.			Escanaba, (via Fort Howard)	Mich.	25 70
Oshkosh, (via Harvard Junction)	"	23 00	Negaunee, (via Fort Howard)	"	28 80
Oshkosh, (via Fort Howard)	"	23 00	Ishpeming, (via Fort Howard)	"	29 00
Neenah, (via Fort Howard)	"	22 15			

THE PURCHASER OF 160 ACRES

Will be allowed a rebate of the whole amount of the fare paid from any point given in the foregoing list, or one-half the amount on purchasing 80 acres, which agreement is fully specified on the ticket. These tickets are good to return within 40 days, and can be obtained at the ticket offices of the Chicago & Northwestern Railway Co. at the Stations named. Also at the ticket offices.

No. 62 Clark St., CHICAGO, Ill. | No. 102 Wisconsin St., MILWAUKEE, Wis.

"LAND LOCATING" TICKETS.

At Marshall, Minnesota, "Land Locating" tickets can be obtained of H. M. Burchard, the Land Agent of the Company. The amount paid for a "Locating" ticket will be allowed the purchaser of 80 acres on his first payment, or one half the amount on 40 acres.

Land Exploring Tickets to Marshall, Minnesota, and return (via Chicago) can be procured at many of the principal ticket offices in the United States and Canada, and the purchaser of these tickets is, upon buying 160 acres of land of the Company, entitled to a rebate of the amount of his fare from Chicago, or half the amount on purchasing 80 acres.

DON'T MISTAKE OR FORGET

That purchasers of our lands are allowed the following rebates:

ON 160 ACRES.—Full amount paid for Exploring Ticket from points in the foregoing list.

Full amount paid for Land Locating Ticket.

ON 80 ACRES.—One half the amount paid for such "Exploring" Ticket. Full amount paid for such "Locating" Ticket.

ON 40 ACRES.—One-half the amount paid for "Locating" Ticket.

Maps of the unsold lands of this company, in any county, and a hand book, or guide, giving description, prices, location, and all needful information, will be furnished free.

CHAS. E. SIMMONS,
Land Commissioner Gen'l Office C. & N. W. R'y,
CHICAGO, ILLINOIS.

H. M. BURCHARD,
Land Agent of said Company, at
MARSHALL, LYON CO., MINNESOTA.

TAKE NOTICE.—That Circulars and Maps, giving terms of sale, location and description of said lands, will be sent by said Land Agent or said Land Commissioner, free of cost, to *all persons* requesting the same.

THE BEST LINE BY ALL ODDS.

In every respect the best Passenger Route between all points in

MINNESOTA,

—AND—

Chicago AND THE East,

—IS THE—

CHICAGO, ST. PAUL AND MINNEAPOLIS LINE,

COMPOSED OF THE

Chicago, St. Paul & Minneapolis, formerly the West Wisconsin, and the Chicago & Northwestern Railways.

The Chicago and Northwestern Railway embraces under one management the Great Trunk Railway Lines of the WEST and NORTHWEST, and, with its numerous branches and connections, forms the shortest and quickest route between Chicago and all points in Illinois, Wisconsin, Northern Michigan, Minnesota, Iowa, Nebraska, California, and the Western Territories.

That portion of the Chicago and Northwestern Railway between Chicago and Elroy (via Madison), and the Chicago, St. Paul & Minneapolis Railway, between Elroy and St. Paul, form a single line between Chicago, St. Paul and Minneapolis, and is known as

The Chicago, St. Paul & Minneapolis Line.

It is the ONLY LINE between St. Paul and Minneapolis and Chicago that passes through Hudson, Eau Claire, Black River Falls, Elroy and Madison, and is the only line that runs on all of its trains North of Chicago, the celebrated

PULLMAN PALACE SLEEPING CARS.

All trains of this great route run through without change of cars.

If you wish the best traveling accommodations, you will buy your tickets by this route, and will take no other.

All Ticket Agents can sell you Through Tickets, and Check usual Baggage Free by this Line.

Passengers from Chicago, Detroit, Toledo, Cleveland, Buffalo, Niagara Falls, Pittsburgh, Cincinnati, Toronto, Montreal, Quebec, Portland, Boston, New York, Philadelphia, Baltimore, Washington, Indianapolis, Cairo, and all points South and East, should buy their tickets via

The Chicago & Northwestern R'y.

Close connections are made at Chicago with Lake Shore & Michigan Southern, Baltimore & Ohio, Michigan Central, Pittsburgh, Fort Wayne & Chicago, Kankakee Line and Pan Handle Routes, and with the Chicago & Alton and Illinois Central Railroads.

New York Office, No. 415 Broadway; Boston Office, No. 5 State Street; St. Paul Ticket Offices, corner Third and Jackson Streets, and at Depot on Sibley Street; Minneapolis Ticket Offices, No. 3 Nicollet House Block, and at St. Paul & Pacific Depot; Chicago Ticket Offices, 62 Clark Street, under Sherman House; 75 Canal, corner Madison Street; Kinzie Street Depot, corner West Kinzie and Canal Streets; Wells Street Depot, corner Wells and Kinzie Streets; San Francisco Office, 2 New Montgomery Street; London (England) Office, 449 Strand.

W. A. THRALL, Gen'l Ticket Agt., C. & N. W. R'y, Chicago, Ill.

W. H. STENNETT, G. P. A., C. & N. W. R'y, Chicago.

MARVIN HUGHITT, Gen. Man. C. & N. W. R'y, Chicago, Ill.

First Div. St. Paul & Pacific Railroad Company.

LAND DEPARTMENT.

HERMANN TROTT, Land Commis'r. BERNHARD DASSEL, Secretary.

ST. PAUL, Minn., April 24, 1878.

J. W. BOND, Esq.,

Secretary State Board of Immigration:

DEAR SIR:—In reply to yours of the 6th inst., I would make the following statement in regard to the lands on our road:

We have now left for sale on our lines of road—

MAIN LINE, 700,000 ACRES. BRANCH LINE, 300,000 ACRES.

Below please find the counties in which these lands are located, with a short statement of the general character of these lands:

ANOKA COUNTY.—These are, for the most part, a light, sandy loam, with oak openings and an abundance of fine meadows. There are several fine lakes in this county.

SHERBURNE AND ISANTI COUNTIES.—This district is abundantly watered by Rum river and its tributaries, and by numerous beautiful clear lakes, abounding in fish. The land is of the same general character as Anoka county, but better in quality, and gradually improving to the west. In the timbered localities it is very good, capable of producing the finest winter wheat. In the northern part of the county there are some fine groves of good sugar maple, basswood, white and black oak, ash and elm. The rest of the district is generally open, with scattering oak. No part of Minnesota offers greater inducements for stock farms. Grazing is good and extensive, and good wild hay is plentiful.

BENTON AND MILLE LACS COUNTIES.—This district is well watered by the Elk and St. Francis rivers and their numerous tributaries. The finest grazing and stock lands in the State are embraced in this section. The upper soil is a strong, black vegetable mold; under this lies sandy loam, rich in lime, &c., and the mixture of the two makes a soil capable of producing 30 to 35 bushels wheat, and 70 to 80 bushels corn, and other produce in proportion. The timber is of the finest quality, and covers a large part of the two counties. Some pine in the northern part.

WRIGHT AND STEARNS COUNTIES.—The most of this district comprises as heavily timbered lands and as productive soil as can be found in this State, or in the United States. The surface is gently rolling; the soil is a deep, black loam, with vegetable mold, and produces extraordinary crops of wheat, rye, oats, corn and vegetables. The lands are well watered by many streams and innumerable beautiful lakes, with clear water, sandy and pebbly shores, and abounding in fish.

WRIGHT AND MCLEOD COUNTIES.—Southwestern part. The soil is very

heavy, black loam, underlaid with clay and gravel, and covered with a dense forest of what is known as hard wood timber.

MEEKER COUNTY.—These lands are much diversified, affording every facility for farming that the husbandman could desire. The eastern and northern parts are generally heavily timbered with oak, maple, linden, ash, &c. The balance of the lands are mostly prairie, with groves of timber skirting most of the largest lakes. The surface is gently undulating, and the soil is a very deep, rich, black, sandy loam. The county is well watered by numerous clear water lakes and streams.

KANDIYOHI COUNTY.—This is generally considered the garden of the State. It cannot be surpassed for beauty of seenery and fertility of soil, being prairie and meadow with numerous beautiful lakes, skirted with groves of timber. All the larger lakes abound with the finest of fresh-water fish. The soil is of a deep, rich, black, loamy character, in places nearly level, in others gently undulating, and from that to quite rolling. There are abundant meadows of good, nutritious bluejoint and redtop grass nearly, if not as good for stock as the tame grasses.

CHIPPEWA, SWIFT AND POPE COUNTIES.—These lands are gently undulating and nearly level prairie, with groves of timber on the Chippewa river and on the shores of all the larger lakes. Extensive meadows stretch along the shores of Shakopee Creek. The soil is a very deep, rich, black, sandy loam, with clay and gravel subsoil.

STEVENS AND GRANT COUNTIES.—All these lands are prairie lands of the very best quality.

TRAVERSE AND WILKIN COUNTIES. These lands are the same as above—the soil a heavy, black vegetable mould, of from 1½ to 3 feet thick, underlaid with clay, and marl in some places. The grasses in this section grow to the height of five feet, showing the richness of the soil.

Under the deeds of trust the Company is obliged to receive its bonds at par. The appraised value of lands of the Company varies from $4.00 to $12.00 per acre, according to locality and quality. The bonds of the Company are of four different issues—each issue commanding a different price, which varies as all other obligations of a similar character. At whatever discount the purchaser of land can procure the Company's bonds, just to that extent he reduces the cost per acre of his purchased lands.

Time contracts are given for ten years, with interest at the rate of 7 per cent. per annum; all interest payable in advance. Company obligations received on account principal; all interest must be paid in cash. Purchasers can pay up at any time during the term. [NOTE.—Whether the bonds of the Company will be received in the future, or rather, after the contemplated changes may be accomplished, we cannot say.]

I think I have answered all questions, and that the ground you desire to cover will be met by the above information. Should you wish any further facts, if they are in my possession, I will cheerfully give them.

Yours respectfully,

HERMAN TROTT,
Land Commissioner.

The Saint Paul & Sioux City Land Grant.

LOCATION.—The Land Grant of the Saint Paul and Sioux City Railroad Company, and of the Sioux City and Saint Paul Railroad Company, in Minnesota, comprises about 900,000 acres.

These lands are situated in the southwestern part of the State, most of them in the counties of Watonwan, Martin, Cottonwood, Jackson, Murray, Nobles, Pipestone and Rock.

SURFACE.—They are as to surface neither hilly nor level, approaching the first only so near as is necessary for proper drainage, and everywhere sufficiently level for convenient cultivation.

Clear running streams and lakes of pure water abound; the banks of many of them are skirted with timber enough to give variety to the landscape, though there are but few groves large enough to supply fuel permanently.

SOIL.—The soil is everywhere a rich, dark loam, two to three feet deep, with usually a clay subsoil.

Experiment has proved it to be well adapted to the growth of wheat and corn, and all the usual grains in their best estate as to quality and quantity, and for stock growing they are not to be surpassed in any State or country.

CROPS.—Wheat is the staple. The flour from the hard Minnesota wheat is the best in the world, and no other State can produce wheat in such perfection.

Barley, oats, rye and flaxseed are also cultivated as successfully as in any country. Corn is one of the most important and profitable crops.

Recent experiments have developed a variety of sugar cane that is especially adapted to the soil and climate, and that yields a syrup and sugar equal in quantity per acre and in quality to the best results of Southern plantations.

Potatoes and all the valuable roots of the temperate zone are grown here in abundance. Hardy varieties of apples, grapes and small fruits are also successfully cultivated.

MARKETS.—All of these lands are within convenient distance of railroad stations, at which the best market price is paid for all grain and other produce every week day in the year.

FUEL.—Coal from the Iowa mines and wood from the Big Woods of the Minnesota River are the usual supply of fuel.

The former costs about $6 to $7 per ton, and the latter about the same price per cord, delivered at the several railroad stations.

Many of the farmers, however, burn hay. This is really a cheap and excellent fuel. It costs, put into stacks near the house, from $1.25 to $1.50 per ton, and by simple machines it is twisted into little skeins and so prepared for convenient and cleanly handling and use, with much less cost and labor than wood can be sawed and split.

A steam flouring mill at Worthington, making one hundred barrels of flour per day, and another at Bingham Lake, making fifty barrels daily, are run exclusively on hay as fuel, and find it both cheap and effective. In these mills no preparation whatever is made of the fuel, it is fed from the stacks directly into the furnaces.

These Railroad Companies to encourage the planting of trees have transported (and will so continue to do) during the planting seasons in the spring and autumn, forest trees and cuttings free of charge, in any quantities to any of the

stations in the prairie counties. And the companies have themselves planted successfully several hundred thousand of young trees along the line of the road.

LUMBER.—With direct and short connection by rail with the inexhaustible pine forests of Northern Minnesota and Wisconsin, these districts are especially favored with good lumber at low prices.

A very comfortable house can be built at from $200 to $600, according to the amount of accommodation required.

It is often the case that settlers arriving in the spring and desiring to get at work at once, find a comfortable shelter until the breaking and fall plowing is completed, in tents or temporary houses.

PRICES AND TERMS.—These lands are appraised at an average of $6 per acre, and one half of them at $5. Some near the railroad stations at $7 or $8, and a few sections at $9.

At these prices the terms of payment are, at time of purchase, one-tenth of purchase price and interest at 7 per cent. in advance on the remainder.

The second payment at the end of the first year is one-tenth of purchase price, and interest as before on the remainder.

The third payment, and the fourth, fifth and sixth also, are each one-fifth of the purchase price with interest on the balance as above at each payment except the last.

If the purchaser is prepared to pay in full for his land at the time of purchase, he receives at once a discount of 20 per cent. from the list price of the land, and as to some lands a greater discount than this is made.

Some of these lands are exchangeable for the land bonds of the Sioux City and St. Paul Company, and as to these lands the discount made by the company where cash is paid, is made to correspond to the discount for the time being on the bonds in a cash market. Purchasers will therefore consult their own interests by dealing directly with the company, rather than looking in the market for bonds which may not be applicable to the lands they want after they have found them.

HALF RATES.—Persons who satisfy us that they in good faith desire to go and examine these lands, with the intention to buy if suited, are supplied with excursion tickets good for ten days at two cents per mile, which is half the regular fare. Persons who have purchased lands of us, are upon application transported over our roads in moving to their purchases at half rates, including their families, stock, household goods and other personal property taken with them at the time.

Land Department tickets are sold at St. Paul or Mankato at full rates to any station when asked for, and the price of these tickets is refunded on the purchase by the person named therein, of eighty acres of land within 30 days after the date thereof.

HOW TO PURCHASE.—It is best in all cases where it is not inconvenient, to come first to the Land Office at St. Paul, and there get all information not otherwise obtained, decide upon the particular county you will go to, and with a map of that county showing the unsold lands, with prices and description, and with excursion tickets to the point you desire to visit, you will be able to make a satisfactory examination at the least expense of time and money.

When this is not convenient, go direct to any of our prairie stations, and get

from local agent there such map and price list, and with an old settler to show you the land lines, proceed at once to select what you want. You can consummate the purchase through the local agent, without going to St. Paul at all, if you so desire.

ADDRESS.—For any information not contained herein, please address Land Department, St. Paul and Sioux City Railroad, St. Paul, Minn., and you will receive an appropriate reply. We have at your service the best farming lands in America, and it is our pleasure as well as our duty to let it be known.

These lands have not been raised in price in view of the rapidly increasing demand for them, but are and will be throughout the present year offered at the old appraisement.

Our policy is not to hold them for high prices, but to sell them at moderate prices, and to see them occupied and cultivated by a happy and prosperous people. You will find in these columns ample reasons for selecting Minnesota before all other States, and these counties before all other portions of the State, as the place for you and yours to build your future homes and fortunes.

It will be in the future, as it has been in the past, the policy of these Railroad Companies to so conduct all its relations with the people they serve, as to enhance the value of the property and advance the general prosperity of both, upon the obvious principle that each must profit by the advancement of the other.

WATONWAN COUNTY.

This county consists of rich, rolling prairie, dotted with beautiful lakes, and is well timbered along its eastern border.

It is traversed by the Watonwan river, which furnishes several valuable water powers, and is threaded by many smaller streams.

Population about 4500

NICHOLSON.—This station is located near the west line of the county, 130 miles from St. Paul, where the company have erected a depot and platted a town-site. There are some 2000 acres under cultivation on the contiguous "Butterfield Farm," and the "Odd Fellows' Colonization Bureau" have secured the agency for several townships of land adjoining this town site, which, by their proverbial energy, will soon be settled with an industrious and prosperous population.

MARTIN COUNTY

Is located immediately south of Watonwan county. Its northern line is some 10 or 15 miles south of our railroad depots at St. James and Madelia, and its eastern line is within four miles of Winnebago City, the present terminus of the Southern Minnesota Railroad. This latter company proposes to extend its road westward into this fertile county during the present year. This county is entirely out of debt, and has money in its treasury. Groves, and belts of timber, and good mill privileges, are very frequent, and schools and church organizations are established throughout the county.

The population of the county is about 5000, generally English and American, with several settlements of Germans and Swedes.

COTTONWOOD COUNTY,

In addition to the Des Moines River, and its numerous smaller streams of pure water, contains some thirty lakes.

The County Auditor reports the population at 4500. There are nearly 1000 farms opened, and 45,000 acres of land under cultivation. There are a number of good water-powers on the Des Moines River, which traverses many miles of the county.

MOUNTAIN LAKE.—This village, 137 miles from St. Paul, contains some 30 or 40 buildings—200 population—a school house, elevator, grain houses, four or five stores, lumber yards, wagon and smith shops, and two steam grist mills, and is attracting trade for many miles in every direction.

It is the centre of operation for a colony of some 1500 German Mennonites, who have recently arrived from Russia, and purchased land in that vicinity. This moral and thrifty people are to be followed by many more of their countrymen, so that the progress of Mountain Lake and the eastern portion of Cottonwood county is well assured.

JACKSON COUNTY.

No. of farms opened, about..... 1,000
No. of acres under cultivation, about.....25,000

There are three flouring mills located on the Des Moines river, which runs through the entire length of the county, affording many other valuable water powers. Along its banks, and upon the borders of the numerous beautiful lakes that gem and adorn the territory, there are about 3000 acres of heavily timbered land. And no soil in the Northwest could be more desirable to the immigrant.

The Southern Minnesota Railroad, now in operation from the Mississippi river, opposite LaCrosse, to Winnebago City, will be extended through Martin and Jackson counties, to the line of our road, at an early day. Indeed, the company and residents along the line are sanguine of its completion during the present year.

HERON LAKE, 160 miles from Saint Paul.—This prosperous village is situated near a large and beautiful lake of the same name, in the midst of a rich and fertile country. A colony of thrifty and industrious Scandinavian farmers from Goodhue County, Minn., have located northwest of Heron Lake, where they have secured 46 sections of choice land, and are about commencing extensive operations.

MURRAY COUNTY.

This county contains a thrifty and industrious population, consisting of Americans, Germans and Norwegians, nearly equally divided. Its lands are unsurpassed, and its lakes are beautiful and picturesque, several of them being large and heavily timbered. Lake Shetek, a beautiful sheet of water, some eight miles in length, with an average of about two miles in width, has upon its banks an abundant supply of timber.

The located line of the Southern Minnesota Railroad traverses this county from east to west, and it must be constructed thereon at an early day.

NOBLES COUNTY.

In point of fertility of soil, the number and beauty of its lakes and small living streams, and the worth and intelligence of its people, this county is unsurpassed by any of its neighbors.

Some 900 farms are opened within the limits of the county, and about 30,000 acres are under cultivation.

Within its boundaries there are six railroad stations, to wit: Worthington, Hersey and Bigelow upon the main line, and Sioux Falls Junction, Miller and Adrian upon the Worthington & Sioux Falls road.

Near Worthington the Worthington & Sioux Falls branch road takes its start westward. It is already completed to Beaver Creek, near the eastern boundary line of Dakota territory, and will reach Sioux Falls by August 1st, next.

ADRIAN is located midway between Worthington and Luverne, and bids fair to rival either of these older villages.

Bishop Ireland has secured the railroad lands in six of the nearest townships, and, with his tireless energy, is building up in that section of the country a prosperous colony, called the "St. Adrian Colony."

PIPESTONE COUNTY.

This county is located immediately north of Rock county. Its lands are fertile, and its future full of promise.

It contains the valuable Pipestone quarry, which has already a national reputation.

This county also is on the line of the Southern Minnesota Railroad location.

ROCK COUNTY.

This is the extreme southwestern county of the State, and has already become proverbial for the quality and quantity of wheat which it produces; and it is not surpassed in the growth of any of the other products of the State.

About 700 farms are opened, and some 27,000 acres of land are under cultivation.

The Rock River, bordered by romantic scenery and numerous belts of timber, passes through the county, affording a number of valuable water powers.

There is an inexhaustible supply of superior building stone at "Blue Mounds," some three miles north of Luverne.

THE ODD FELLOWS' COLONY.

This colony is located in towns 105, 106 and 107, range 33, being the three western townships of Watonwan county, and embraces 108 square miles of splendid arable land, owned by the St. Paul & Sioux City Railroad Company. The town site and railroad station of Nicholson is in the centre of the tract. The colony was organized by a few Odd Fellows of this State, who secured homesteads there, and finding that the demand by members for land in the locality promised to become large, secured the three townships named from the railroad company, for a colony. The price of the land ranges from $6 to $9 per acre, according to the distance from the station. It is designed to build up here a community of brothers, with good schools, churches, a lodge, mills, factories, and all the essentials of a prosperous neighborhood. For circulars and maps giving full particulars, address Chas. N. Bell, or J. Fletcher Williams, St. Paul.

ST. ADRIAN COLONY.

It is the well-known policy of the Catholic Church in this State to look well to the material prosperity and general welfare of its people in things temporal as well as spiritual.

Rt. Rev. John Ireland, of St. Paul, has long been distinguished for the zeal, ability and success with which he has illustrated the policy of his church in this direction. His "St. Adrian Colony," though commenced only a few months ago, is already an assured success. His agents in the Eastern States are supplying to those needing it the information required to make their translation to these new homes easy and comfortable, and the local arrangements for their reception at St. Paul and St. Adrian are provided in advance.

E. F. DRAKE,

April 26, 1878. President St. Paul & Sioux City R. R. Co.

ONE MILLION ACRES OF LAND,

SITUATED IN

Southwestern Minnesota and Northwestern Iowa,

FOR SALE.

Located along the line of the St. Paul & Sioux City, Sioux City & St. Paul, and Worthington & Sioux Falls Railroads.

Lands producing 20 to 40 bushels of wheat per acre.

Lands producing Indian corn, 40 to 60 bushels per acre.

Lands unsurpassed for all small grains and vegetables.

Abounding with lakes and streams; well water easily obtained.

Soil rich loam, suited for all crops.

Natural blue joint meadow, with prairie grass suitable for mowing on the upland.

The most healthy climate in the world—agues never known; population industrious and orderly; with churches, schools, mills and thrifty villages along the whole lines of road.

Settlements of Americans, Germans and Scandinavians; Odd Fellows' and Catholic colonies.

Lands sold on long credit, or may be bought with cash or Land Bonds at very low prices.

Send for copy of Minnesota Homestead, giving full information; or, for prices of particular lands and half rate excursion tickets to land seekers, apply personally or by letter to

LAND DEPARTMENT,

St. Paul & Sioux City Railroad,

ST. PAUL, MINN.

Northern Pacific Railroad Lands.

OFFICE NORTHERN PACIFIC RAILROAD,
ST. PAUL, APRIL 25, 1878.

JOHN W. BOND, *Secretary Board of Immigration:*

SIR:—In compliance with your request of the 9th inst., I have the pleasure of submitting the following statement in reference to the lands and country generally along the line of the Northern Pacific Railroad in the State of Minnesota and Territory of Dakota—extending from Duluth, at the head of Lake Superior, to Bismarck, on the Missouri.

Very truly yours,
JAS. B. POWER,
Gen. Agt. Land Department N. P. R. R.

The Northern Pacific Railroad Company have in the State of Minnesota, and are now offering for sale, 1,615,400 acres, located in different counties, as follows:—

	Acres.
St. Louis County	143,000
Mille Lacs	90,000
Aitkin	218,500
Crow Wing	88,300
Itasca	55,000
Cass	532,500
Morrison	7,000
Todd	34,700
Wadena	112,400
Otter Tail	123,000
Becker	160,000
Polk	51,000

With the exception of St. Louis, Otter Tail, Becker and Polk Counties, the lands designated are located in the valley of the Upper Mississippi River. St. Louis County, lying east of the dividing ridge between the waters of the Mississippi and Lake Superior, can properly be called part of the lake basin. Mille Lacs, Aitkin, Crow Wing, Itasca, Cass, Morrison, Todd and Wadena counties are all in the Upper Mississippi Valley. The counties of Otter Tail, Becker and Polk, all west of the ridge dividing the waters of the Mississippi and Red Rivers, are part of the great Red River Valley of the North, although the term "Red River Valley" is usually applied, and generally considered as being that part of it embraced between the slopes approaching it from the east and west; in other words, the level portion of what is pronounced by Prof. Winchell as the original lake bed of that section of country. The western part of Otter Tail and Polk, and all of Wilkin and Clay counties, are also within the limits of the grant to this road; but the railroad lands are not now in the market, on account of a dispute as to title with the St. Paul & Pacific road, the determination of which will be by the courts.

The character of the country embraced in the grant to this company, and the lands now offered for sale, are worthy of a very extended description.

The entire country in the Lake Superior basin and around the head waters of the Mississippi River is covered with a forest growth. The flora embraces several varieties of pine, also cedar, fir, tamarack, balsam, ash, aspen, elm, maple, birch, oak and other woods, and is identical with that of New York, Pennsylvania, the New England States and Canada. In this forest region there are many meadows and marshes, covered with luxuriant native grasses, where thousands of tons of hay may be had for the cutting. From these natural meadows the lumbermen's teams are supplied with hay during the winter. The blue-joint, foul-meadow, red-top and other varieties of grasses are indigenous, and not unfrequently yield three tons per acre. As the timber disappears before the lumberman's ax, the country will become dryer, and there are large tracts of these now swampy lands which will ultimately be brought under cultivation, as has been the case in Ohio, Indiana, Michigan and Wisconsin. Between the lakes there are low ridges and belts of land where the soil is excellent, and where wheat, rye, barley and potatoes will yield as large returns as in other sections of the State. English grasses grow luxuriantly. In the immediate vicinity of the Mississippi the soil is sandy, but, from the fact that it contains a large percentage of lime, produces good crops.

Crossing the Mississippi River at Brainerd, the road passes through the counties of Cass, Wadena, and the northeastern part of Otter Tail to Detroit, in Becker county, where is reached the well known "Park Region" of the Northwest, a distance of 92 miles from Brainerd.

This section of the country is generally more diversified than the region east of the Mississippi. There are prairies, low hills, ridges, swales and meadows watered by numerous lakes, ponds and clear running streams. There are wide belts of forest, and isolated groves and parks, presenting beautiful and charming landscapes. The surface is, as a rule, gently undulating, and, in a region so extensive, different varieties of soil are found; principally, however, being a rich sandy loam, warm, quick, and easy of cultivation. Corn ripens early; oats, barley and rye give large returns, and vegetables produce enormous yields. The yield of wheat on this soil is not as large as on the heavier soils of the Red River Valley to the west, yet it is a profitable crop, and largely in excess of the average in Ohio or Iowa.

The growth of timber also differs from that east of Brainerd, consisting principally of maple, oak and elm, with some pine. During the past year settlers have taken up considerable quantities of this land, and in clearing it for cultivation have found ready sale for their wood to the railroad company at remunerative prices.

At both of the villages of Wadena and Perham are quite extensive tracts of clear, open prairie, now generally well taken up, and are being rapidly improved by their energetic occupants.

THE PARK REGION

Is so called on account of the many picturesque parks and groves, which, with the intervening lawns and undulating prairies, waving in summer with luxuriant grasses, lend a charm and beauty to the landscape hardly to be surpassed on the continent.

The soil is deeper, darker and richer than that of any country east of it. The sandy element gives place to clay and lime, which, with the great amount of organic matter, makes it exceedingly fertile.

The country west of Detroit Lake was almost a solitude in 1871, but is now quite thickly settled. Most of the desirable sections of government land near the line of the railroad have already been taken as homesteads. The region is so attractive that many settlers secured homes before the lands were surveyed.

In addition to the richness of the soil, the abundance of pure water, and the attractive features of the landscape, is the large area covered with timber—not in unbroken forests, but in groves, easy of access. Here the settler may commence at once to turn the sod, inclose his field, and from a neighboring grove obtain his fencing material and wood for his fire.

THE VALLEY OF THE RED RIVER OF THE NORTH, IN MINNESOTA AND DAKOTA.

Here the visitor finds the great "Wheat Field of America," the settler of moderate means lands unsurpassed on the continent for productiveness, from which he can select a farm of any desired size, from 40 to 160 or more acres, and it is here that the capitalist has already commenced demonstrating that great farms can be managed with corresponding profit; where furrows, unbroken by hillocks, hollows, ridges, or other obstructions, may be turned for ten or even twenty miles between the streams tributary to the Red River, or between the river and the eastern or western boundary of the valley. To the eye, the valley seems perfectly level; but the descent to the river is at the rate of ten feet to the mile—sufficient for drainage. There are but few lakes or ponds in the valley, but it is watered by the Buffalo River and its branches, the Wild Rice and other streams on the Minnesota side, and by the Sheyenne, Maple, Elm, and others on the Dakota side; while excellent water can be obtained anywhere in the valley by sinking wells from fifteen to twenty-five feet deep.

The prairie is covered in summer with a heavy growth of grass, furnishing a vast area of fine pasturage, and where hay may be cut for winter use. The grass is very nutritious, and stock turned out to pasture in April is fit for the market in midsummer.

The valley of the Red River is about three hundred and fifty miles long north and south, and about forty miles east and west, containing an area of about twenty thousand square miles of land unsurpassed for fertility. The soil is an alluvial, black, argillaceous mold, rich in organic deposits, and resting, for a depth of two to four feet, on a tenacious clay subsoil, and is easily cultivated. Wheat is the principal staple, some fields having been known to produce forty-five bushels to the acre without fallow or manure. Oats, barley and potatoes yield corresponding crops. Garden vegetables, including cucumbers, radishes, peas, beans, onions, and even watermelons, grow well, mature fully, and are of excellent quality.

The secret of this remarkable summer growth, aside from the fertility of the soil, lies in the length and warmth of the summer days. Though the nights are cool, the mercury often goes up to one hundred degrees at mid-day. And not only are the days warm, but they are several hours longer than in the more southern latitudes. With such warm and long days, growing crops ought to do good work. The measures of heat are ample for the production and development of Indian corn.

The lands of the company are appraised with reference to their agricultural value and distance from road, ranging in price from $2.50 to $10 per acre, and at these prices the company takes its preferred stock at par.

In addition to the low prices at which the company sells its lands, it gives to all settlers coming to the line of road, for the purpose of buying either railroad or government lands, very material reductions in rates of fare for themselves and families, and special freight rates for the transportation of their household goods, live stock and farming implements.

In addition to the one million six hundred thousand acres of Minnesota lands offered by this company, they also have for sale over four millions of acres of prairie lands in Northern Dakota at prices ranging from $2.50 to $8.50 per acre, that can also be bought in the same way by the company's preferred stock. This section of Dakota is so directly tributary to our State, that it is practically part of it, and a brief description of it can preperly be attached to this report.

THE TERRITORY OF DAKOTA.

Leaving the Red River at Fargo, the road enters the Territory of Dakota, the first twenty-five miles crossing the western part of the Red River valley, already described. The face of the country at this point begins to show gentle undulations until reaching the summit of the hill above the Sheyenne valley, 60 miles west of Fargo, where it becomes more rolling. The Sheyenne River is a stream having its source some 80 miles north of the road and west of Devil's Lake. The first fifty miles of its course it runs eastwardly, then changes its course to the south for a distance of nearly 100 miles, then bends gradually to the east and north, and empties into the Red River some ten miles north of Fargo, the railroad first crossing it about five miles west of this place. The extent of country it drains, and the constant supply from innumerable springs in the bluffs on either side, makes it an ever-living stream of pure water. The river is fringed with timber from its source to its mouth, consisting of oak, elm, ash, and box elder, at some places in considerable quantities.

The Sheyenne valley is from one-half to a mile and a half in width, sloping gradually from the foot of the bluffs to the stream. In addition to its ordinary agricultural capacities, this valley is peculiarly well adapted to stock raising, on account of its sheltered position, abundance of pure water, timber, rich soil and nutritious grasses. Indications of coal have also been found along the bluffs.

Passing out of the valley of the Sheyenne, the road runs across the rolling prairie between that and the James River, a distance of forty miles. James River at this point is a small yet ever-living stream, heading some forty miles north of the road, and with a general southerly direction, empties into the Missouri River at Yankton. The valley of this stream is very similar to that of the Sheyenne, although with less timber; yet it is very attractive, and, like the Sheyenne valley, is already drawing to it the attention of those who are looking for good locations for permanent homes.

From Jamestown to Bismarck, a distance of 100 miles, the character of the country is very much the same as that east of the James River. Through the counties of Barnes, Stutsman, Kidder and Burleigh, the country is a gently rolling prairie, broken only by the valleys of the Sheyenne and James Rivers, and by the bluffs of the Missouri River, and is without timber, except on the streams. The soil, with but few exceptional places, is a sandy loam from fifteen to twenty inches deep, with clay sub-soil, and is susceptible of profitable cultivation of grains and vegetables.

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guous to the line of road, and situated in the counties of BENTON, MOR- ISON, TODD and CROW WING, all in the UPPER MISSISSIPPI VALLEY, at from $1.25 to $8.00 per acre, on seven years' time, at seven per cent. interest. Liberal discounts for cash.

particulars address,

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45 Jackson Street, ST. PAUL.

Common Schools.—Material Basis of the System.

The Common Schools of Minnesota are munificently endowed with sections 16 and 36 in every township, being one-eighteenth of the whole State. The Constitution provides that the proceeds of these lands shall remain a perpetual school fund to the State; that the principal arising from the sale of such lands shall ever remain inviolate and undiminished, and the income accruing from leases or sales shall be distributed to the different townships, in proportion to the number of scholars therein contained, between the ages of five and twenty-one years.

This magnificent inheritance of the millions yet to be, guarded by a judicious and efficient code of school laws, places the benefits of the common school within the reach of every home in the State. And no efforts are spared by those entrusted with her educational interests, to make the common schools of Minnesota equal in every respect to similar schools in the Eastern States.

This excellent system for the free education of all the children in the State is in successful operation. At the first session of the Territorial Legislature, in 1849, a law was enacted for its establishment. In order to exhibit at a single glance the prodigious development of the common school system during the intervening 26 years, the few items embraced in the first school report in 1851, are contrasted below with the corresponding results for 1877.

	1851.	1877.
Whole number of school districts	13	3,700
Whole number of school houses	5	3,141
Aggregate value of school houses and sites	$2,500	$2,982,516
Whole number of scholars	250	162,551
Number of male teachers		1,711
Number of female teachers		3,031
Total productive school fund		$3,388,569
Total apportionment of income to schools		221,327
Income from one mill tax		209,836
From special taxes		750,162
Total cost of public schools		1,181,326

The system was re-organized in 1862. A new law was that year enacted for the better regulation and support of common schools, which, in its essential features is still in force.

It will be remembered that these schools are perfectly free to the children of the rich and poor alike, who meet upon terms of perfect equality, and receive the blessings of education, pupils receiving marks of distinction only upon superior behavior and scholarly achievements.

In this Congressional grant of three million acres we have the material basis of our public school system. Of this immense domain, but 500,000 acres, about one sixth, have been sold, and already there is accumulated a fund of $3,388,569, which is exceeded by that of only four other States, three of these being the old and wealthy States of New York, Massachusetts and Ohio. As above stated, the interest arising from sales of school lands, with proceeds of annual sales of grass and stumpage, constitutes the general or current school fund of semi-annual distribution. These proceeds, with an annual levy of a one mill tax, afford present support to the common schools of the State. If the residue of school lands shall be sold at prices equal to those heretofore obtained, viz.: $6.07 per acre, the permanent school fund of the State will amount to nineteen million dollars.

The above was inadvertently omitted from its proper place on page 61.

Minnesota Sugar Cane.

THE EARLY AMBER—AMBER CANE SUGAR, SYRUP AND VINEGAR.

At the close of the war, two men, strangers, whose homes were twenty miles apart, in the heart of that immense forest known as the "Big Woods" of Minnesota, struggled with tenacity and persistence to successfully manufacture molasses from the sorghum or Chinese sugar cane. The product was that dark, rank article known in commerce fifteen years ago as sorghum.

One of these men chanced upon the seed of a hybrid, an acclimated species of the cane known as the "Minnesota Early Amber," which, by some inspiration, he was induced to send to a friend in Missouri, with directions to plant it there and return to him the ripened seed. From the first crop produced by that seed he was able to manufacture a syrup that was so immeasurably superior to his former productions that he was assured of complete success. Either of these men might have succeeded alone, but when they came together, and combined their experience and their resources of skill and invention, a new industry was born, and a new factor in the wealth and commerce of the State now commands public attention. These men are Seth H. Kinney, of Morristown, and Charles F. Miller, of Dundas, Rice county.

I have witnessed there the manufacture of syrup and sugar that rivals in excellence the productions of Louisiana and the West Indies.

Morris township alone, in Rice county, manufactured last year 12,000 gallons of amber syrup—equal to 120,000 pounds of sugar, according to the analysis of Mr. Studiniski, the St. Louis chemist and practical refiner. Mr. E. H. Kenny manufactures one hundred and forty gallons per day. He is running two of the Madison climax mills, with Cook's patent evaporator, upon which he has effected a very important improvement. The advantage of his invention is in removing the accumulated scum immediately at the point where the sap first touches the pan. The entire process of boiling or reducing the sap is thus freed from the presence of the scum. He sells the syrup at from 65 to 70 cents a gallon by the barrel. It can be manufactured at a cost not exceeding ten cents a gallon. Amber cane yields about 1,000 pounds of seed to the acre, which sold last year from fifteen to twenty cents a pound. It is also valuable for feed. The yield of syrup is from one hundred and forty to two hundred and eighty gallons per acre. He also manufactures vinegar. One gallon of syrup produces ten gallons of vinegar of a very superior quality, worth in the market twenty cents a gallon. In a late letter to me he says: "I should be really glad if you could come and see what a splendid lot of sugar I have. Some of the barrels are solid sugar, so compact it will not run on removing the bung. I attribute it in a large measure to my improved mode of taking care of the scum. I am procuring a patent on it, and if secured, shall build the largest sugar works in the Northwest. I have sold more than one-third of my syrup, at 70 cents, by the barrel. I shall be glad to show you what I have accomplished. I have tons of sugar, and of the finest quality. I am proud of such an achievement in Minnesota. I have learned some things the past season which I have not made public, as a close inspection of the sugar, granulated almost solid in the barrels, will testify. I do not think there is another such a sight in Minnesota, and if you come I will let you inspect thirty large barrels. Many contain sixty gallons each." The day is not far distant when every farmer in this State, possessing the soil and cheap fuel that are requisite for the growth and manufacture of the Minnesota Early Amber cane, together with the skill and intelligence of these men, which are at the service of all who will read, or visit them, will as surely produce his own sugar and syrup as he now does his own fruit, or any other luxury. There are some items of interest and profit connected with this subject, such as the manufacture of vinegar, of a quality so superior that it only needs to be known and it will supersede all others, and of the fattening of stock upon the refuse cane and scum from the boiling juice, which will not be long overlooked by the thrifty farmer. It is easy to see that the day is near at hand when Minnesota will not only produce all the sugar, syrup and vinegar that is needed for home consumption, but will have immense quantities for export.

The Catholic Colonies in the State.

Catholic Colonization Bureau of St. Paul, Minn.

The Catholic Colonization Bureau was established under the direction of Right Rev. Bishop Ireland, of St. Paul, in the spring of the year 1876. Since then its efforts in behalf of Catholic colonization have been crowned with most gratifying success. It affords Catholic immigrants seeking homes on the fertile prairies of Minnesota great facilities for obtaining reliable information concerning the State, and secures them half-fare railroad rates from St. Paul to any of the Catholic colonies. During the past winter it has distributed upwards of 13,000 pamphlets in English and German, and two of its agents, Mr. Dillon O'Brien and Rev. Fr. Berghold, have been lecturing in English and German in all the large cities of the East. There are at present three Catholic colonies in Minnesota, and steps are being taken to open a fourth.

The first is in Swift county, 120 miles from St. Paul, on the line of the St. Paul & Pacific Railroad. Twelve townships have been reserved in this county for colonists. The principal villages are De Graff and Clontarf. Rev. J. F. Swift, represents the bureau at De Graff, and Rev. A. Oster is its agent at Clontarf.

The second colony is in Nobles county, 197 miles from St. Paul, in the southwestern part of the State, and on the line of the St. Paul & Sioux City Railroad. Six townships have been reserved here, and Rev. A. Knauft acts as agent for the bureau at St. Adrian, the principal village.

The third colony is in Big Stone county, 22 miles from Morris, and about 180 miles from St Paul. All the land here is Government land. Col. J. R. King represents the bureau at Graceville, on Lake Tokua.

At the office of the bureau at St. Paul, immigrants can obtain information concerning all the Catholic colonies in general, and local agents, who are provided with maps and plats, will furnish details and assist them in the selection of lands.

Pamphlets giving full particulars can be had on application by letter or postal card. For further information address Catholic Colonization Bureau, St. Paul.

The Druid Farming and Colonization Company.

In organizing the DRUID FARMING AND COLONIZATION COMPANY, the originators had a two-fold object in view, viz.: To present to the members of the order an opportunity for an absolute safe and profitable investment, and assist such members as desire to secure a home in the country and to follow the pursuit of farming, in obtaining the best kind of land at a low price, and that, too, in a neighborhood where they will be surrounded by men belonging to the same brotherhood, and where good public schools can at once be established. With this object in view, the company had reliable men visit the different parts of the State, known to abound in rich farming lands, for the purpose of selecting the very best, and acting upon their report, it was decided to select Township 117, Range 36, (the Southwestern Township of Kandiyohi County,) as a base for their operations. These lands are considered, by all who know, to be the very garden spot of all Minnesota, and are situated six miles from the Hastings & Dakota Railroad, and ten miles from the St. Paul & Pacific Railroad. These Railroads will offer competing markets for all the products of that country, and prices will, on that account, never be much less than obtained in St. Paul and Minneapolis. Granite Falls, the second greatest water power in the State, capable of turning one thousand run of mill stone, is within the reach of sixteen miles. Thus, it will be seen, that the lands that produced over thirty bushels of wheat to the acre, are as near to markets as lands in other States that sell at $50 an acre. Our purpose is now to open one large wheat farm and one large stock farm, and to that end begin with the making of all necessary improvements at once. These farms will form the centre of the Druids Colony, and will also serve members who desire to settle in the vicinity as a base for their operation. A Village will also soon be established.

For further information, apply for circular, to

J. P. LEITNER, Secretary,
St. Paul, Minn.

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